HITACHI
SERVICE MANUAL

TK | **No. 2266E**

VT-64A

Technical Data

DIFFERENCE FROM VT-62A	● WIRELESS REMOTE CONTROL ● VIDEO HEAD: 4 HEADS
REFERED MANUAL	● VT-62A: TECHNICAL DATA No. 2240E
DIFFERENCE CIRCUIT	● V.S TUNING CIRCUIT BOARD ● TIMER CIRCUIT BOARD ● OPERATION SWITCH CIRCUIT BOARD ● REMOTE CONTROL (TX) CIRCUIT BOARD ● MAIN CIRCUIT BOARD (SYSTEM CONTROL, AUDIO-JACK, SERVO) ● HEAD SWITCHING CIRCUIT BOARD ● LUMINANCE/CHROMA CIRCUIT BOARD

* All the parts are described in the replacement parts list.

TABLE OF CONTENTS

SCHEMATIC/CIRCUIT BOARD DIAGRAMS
- **REMOTE CONTROL (TX)**
  - Schematic diagram 2
  - Circuit board diagram 3
- **TIMER**
  - Schematic diagram 4
  - Circuit board diagram 7
- **V.S TUNING**
  - Schematic diagram 9
  - Circuit board diagram 11
- **OPERATION SWITCH**
  - Schematic diagram 13
  - Circuit board diagram 15
- **SYSTEM CONTROL**
  - Schematic diagram 17
  - Circuit board diagram 25
- **AUDIO-JACK**
  - Schematic diagram 19
  - Circuit board diagram 25
- **SERVO**
  - Schematic diagram 22
  - Waveforms 21
  - Circuit board diagram 25
- **LUMINANCE/CHROMA**
  - Schematic diagram 28
  - Waveforms 30
  - Circuit board diagram 33
- **HEAD SWITCHING**
  - Schematic diagram 28
  - Circuit board diagram 30

EXPLODED VIEWS
- **CYLINDER MOTOR SECTION** 36
- **CABINET SECTION** 37

REPLACEMENT PARTS LIST 39

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

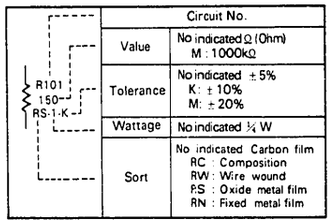
VIDEO CASSETTE RECORDER

April 1985 **TOKAI WORKS**

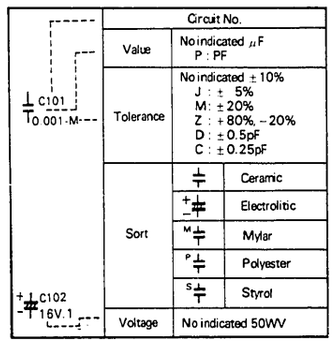
SCHEMATIC/CIRCUIT BOARD DIAGRAMS

Note

1. Voltage measured at base of chassis with minimum volume control and no signal.
   ( ) are shown in recording condition.
2. Nomenclature of Resistors and Capacitors.



Circuit No.	
Value	No indicated Ω (Ohm) M : 1000kΩ
Tolerance	No indicated ± 5% K: ± 10% M: ± 20%
Wattage	No indicated ¼ W
Sort	No indicated Carbon film RC : Composition RW : Wire wound RS : Oxide metal film RN : Fixed metal film

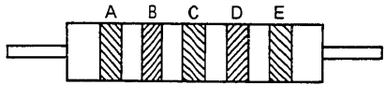


Circuit No.		
Value	No indicated μF P : PF	
Tolerance	No indicated ± 10% J : ± 5% M: ± 20% Z : + 80%, – 20% D : ± 0.5pF C : ± 0.25pF	
Sort	‡	Ceramic
	+‡	Electrolitic
	M‡	Mylar
	P‡	Polyester
	S‡	Styrol
Voltage	No indicated 50WV	

3. Be sure to make your orders of resistors and capacitors with value, voltage, tolerance and sort.
4. When replacing capacitors marked With * use specified ones stated on parts list since required temperature characteristics.

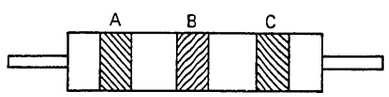
HOW TO READ CAPACITY AND INDUCTANCE OF RESISTOR SHAPE CAPACITORS AND COILS

CAPACITOR



CAPACITY: (10A+B)xC [PF]
TOLERANCE: D
RATED VOLTAGE: BODY COLOR
Pink: 25V
Green: 50V
CHARACTERISTICS: E

COIL



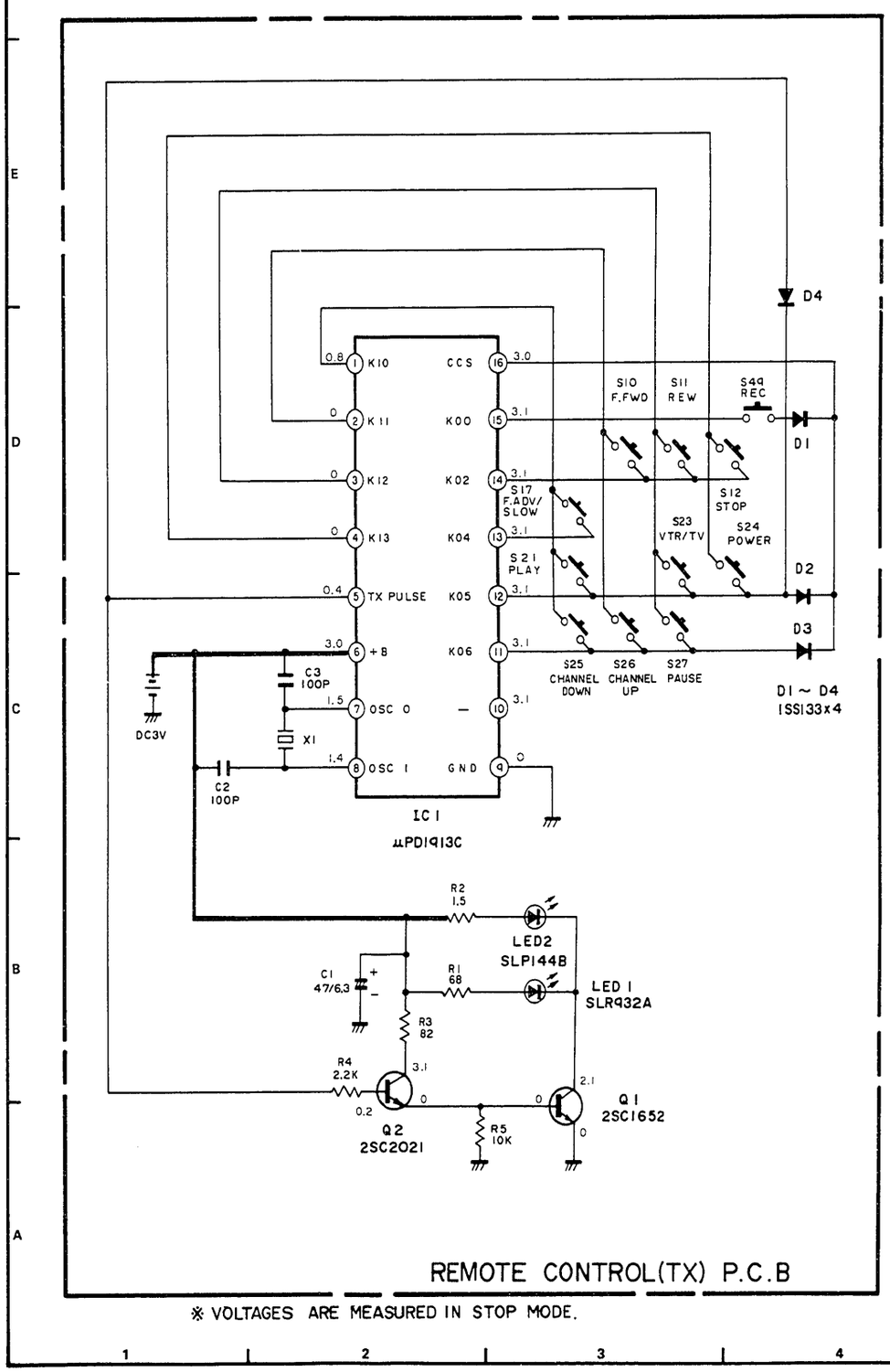
INDUCTANCE: (10A+B)xC [μH]

COLOR	A, B	C	D	E
Black	0	10^0	±20%	For temperature compensation
Brown	1	10^1		
Red	2	10^2		
Orange	3	10^3		
Yellow	4	10^4		
Green	5	10^5		
Blue	6			
Violet	7			
Grey	8		±30%	High dielectric constant type
White	9			For temperature compensation
Gold		10^{-1}	± 5%	
Silver		10^{-2}	±10%	High dielectric constant type

Cautions on use of MOS IC

1. The MOS IC is inserted in black foam for shipment. This foam is a conductor which short-circuits between the leads to prevent damage. Do not remove ICs from this foam during their storage. Avoid removing ICs from this foam, placing them on plastic which is likely to be charged with static electricity or inserting them into styrol foam.
2. High voltages may be applied during doldering caused by leakages from the soldering iron, so be sure to ground the tip of the soldering iron or use a low voltage soldering iron.
3. The human body, clothes made of synthetic fibres or nylon gloves may be charged with several thousands volts of static electricity because of friction, so a workers should be grounded.
4. Be sure to ground measuring instruments such as oscilloscopes, VTVMs, etc. used for repairs.

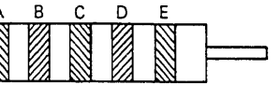
REMOTE CONTROL (TX)



AGRAMS

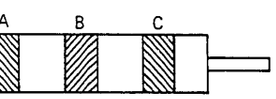
CAPACITY AND INDUCTANCE OF
E CAPACITORS AND COILS

CAPACITOR



TY: (10A+B)xC [PF]
ANCE: D
VOLTAGE: BODY COLOR
Pink: 25V
Green: 50V
CTERISTICS: E

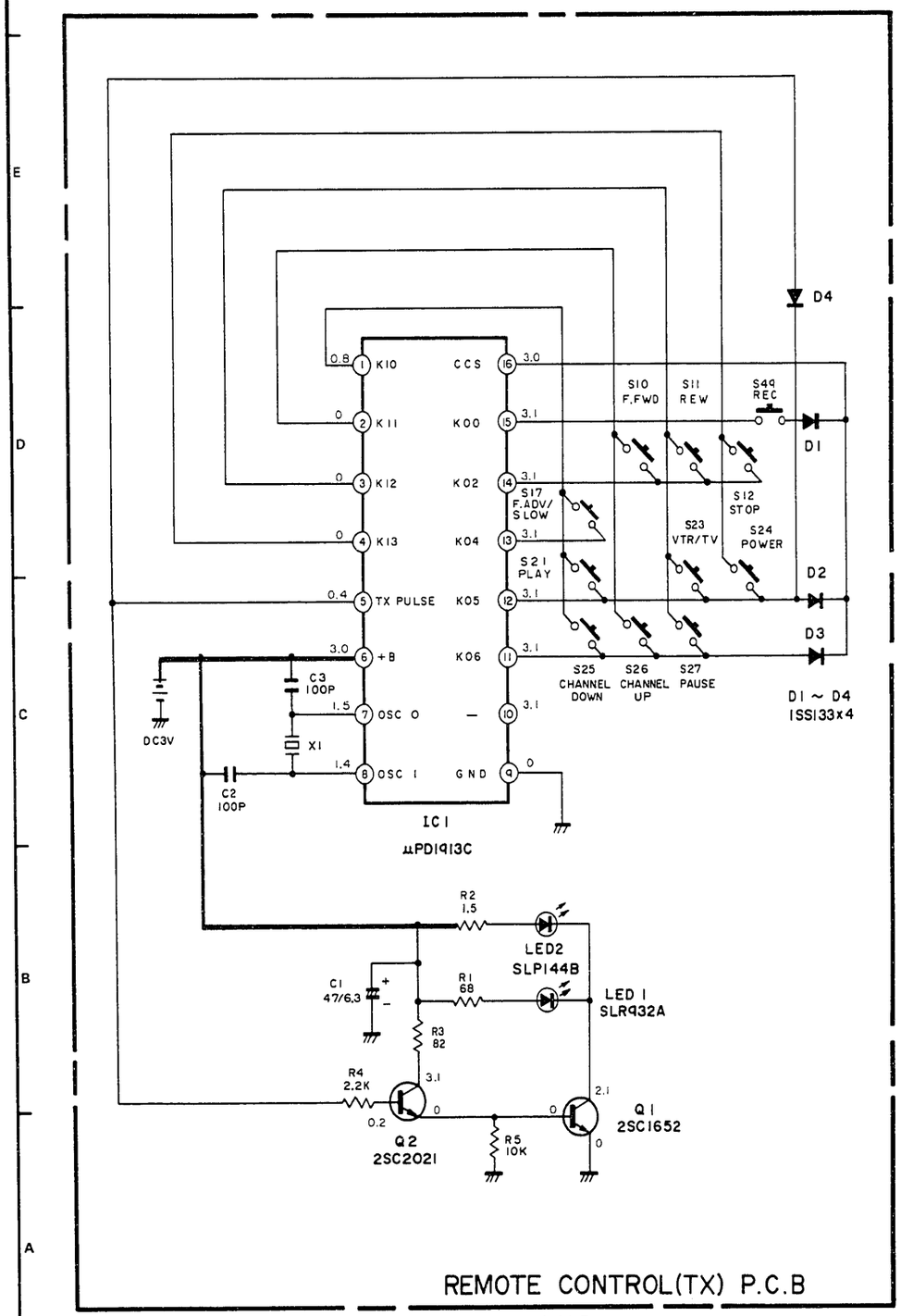
COIL



ANCE: (10A+B)xC [μH]

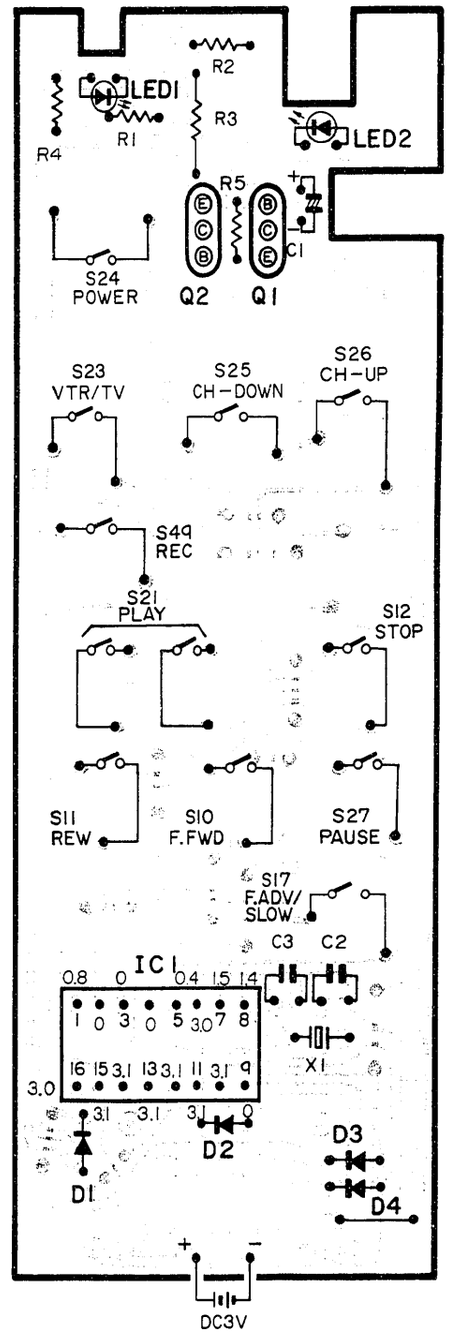
C	D	E
10^0	±20%	For temperature compensation
10^1		
10^2		
10^3		
10^4		
10^5		
	±30%	High dielectric constant type
		For temperature compensation
10^{-1}	± 5%	
10^{-2}	±10%	High dielectric constant type

REMOTE CONTROL (TX)



REMOTE CONTROL(TX) P.C.B

※ VOLTAGES ARE MEASURED IN STOP MODE.

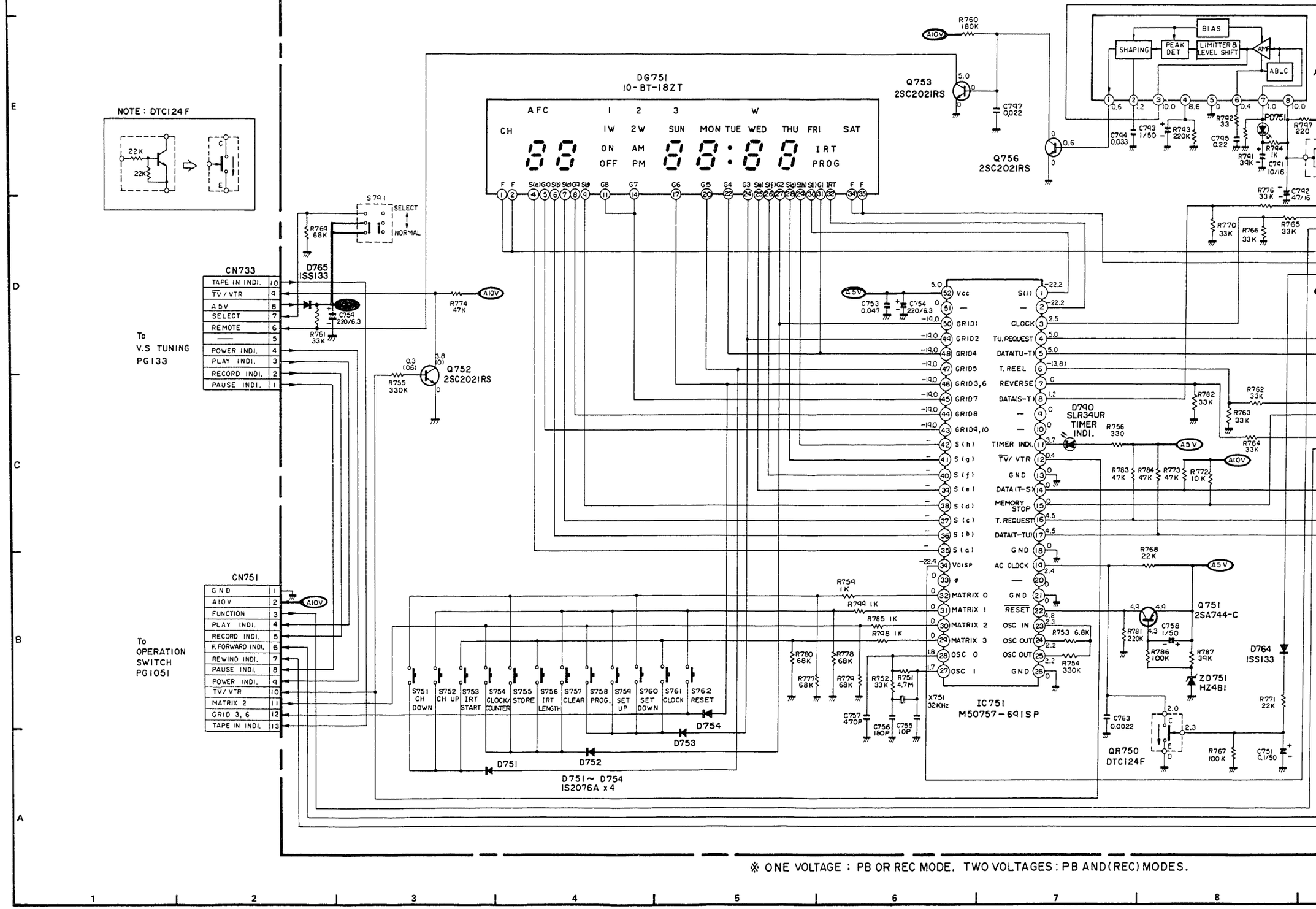


REMOTE CONTROL(TX) P.C.B

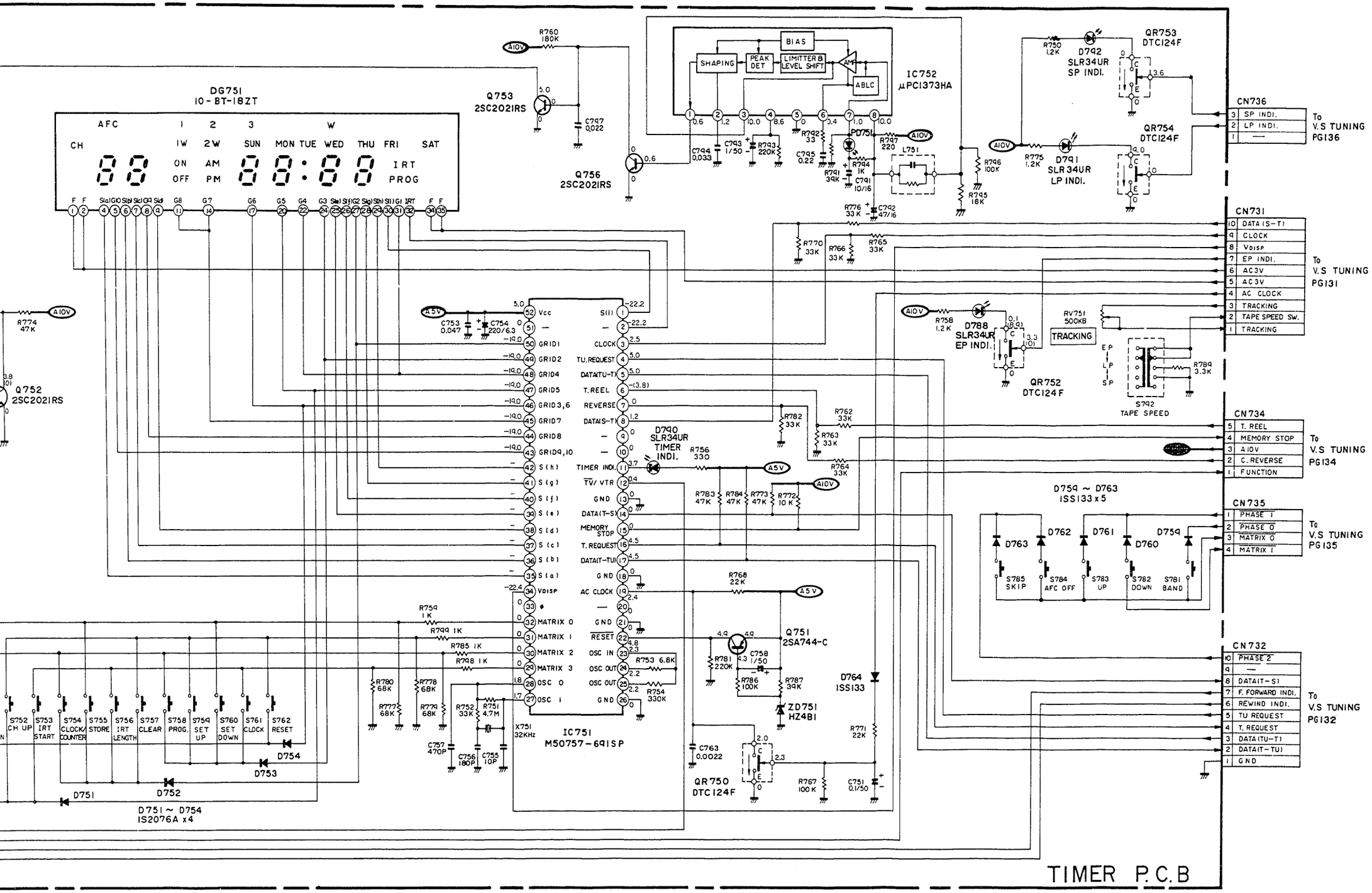
SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO - JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

: CARBON PATTERN

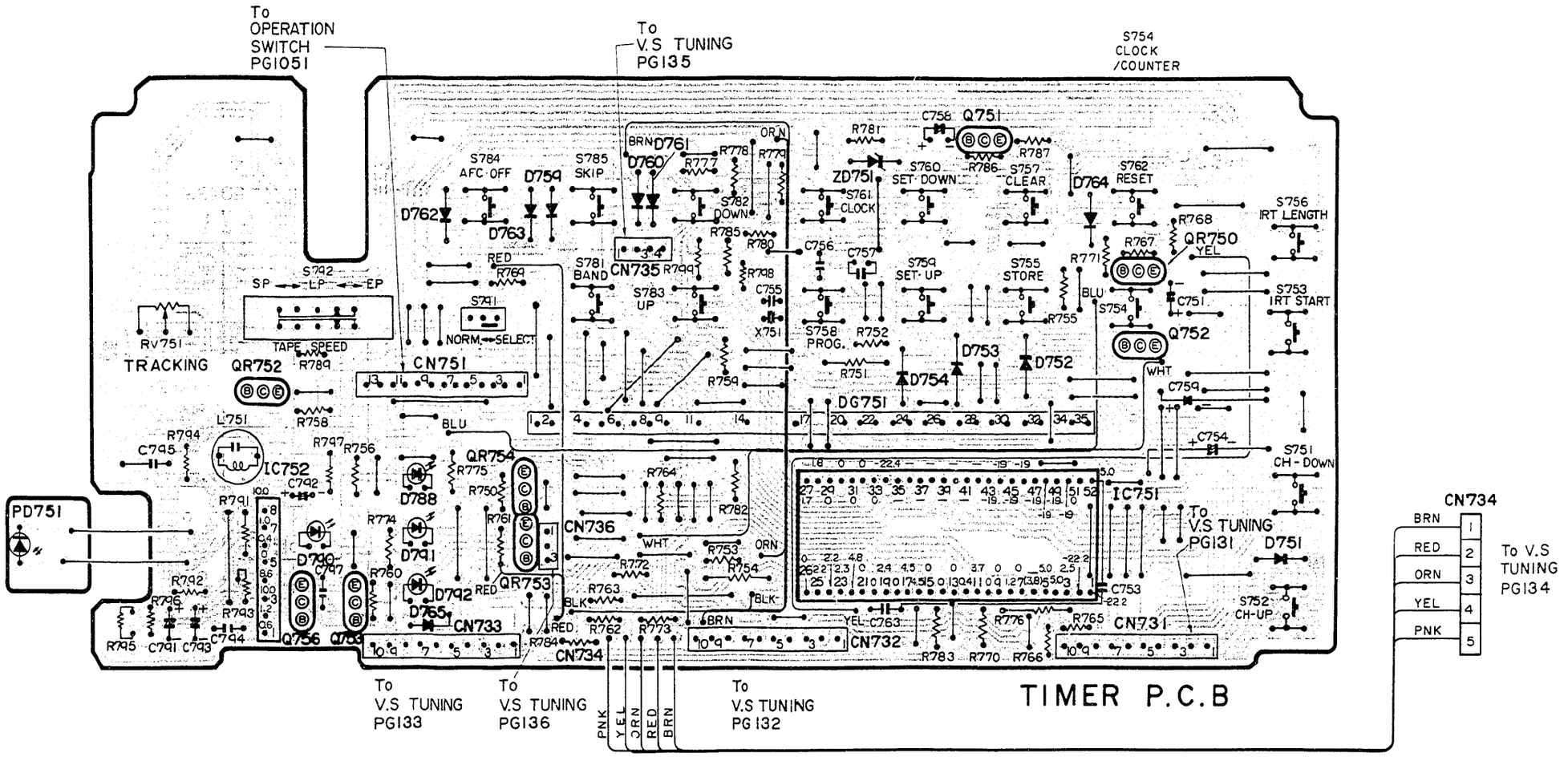
TIMER



※ ONE VOLTAGE : PB OR REC MODE. TWO VOLTAGES : PB AND (REC) MODES.

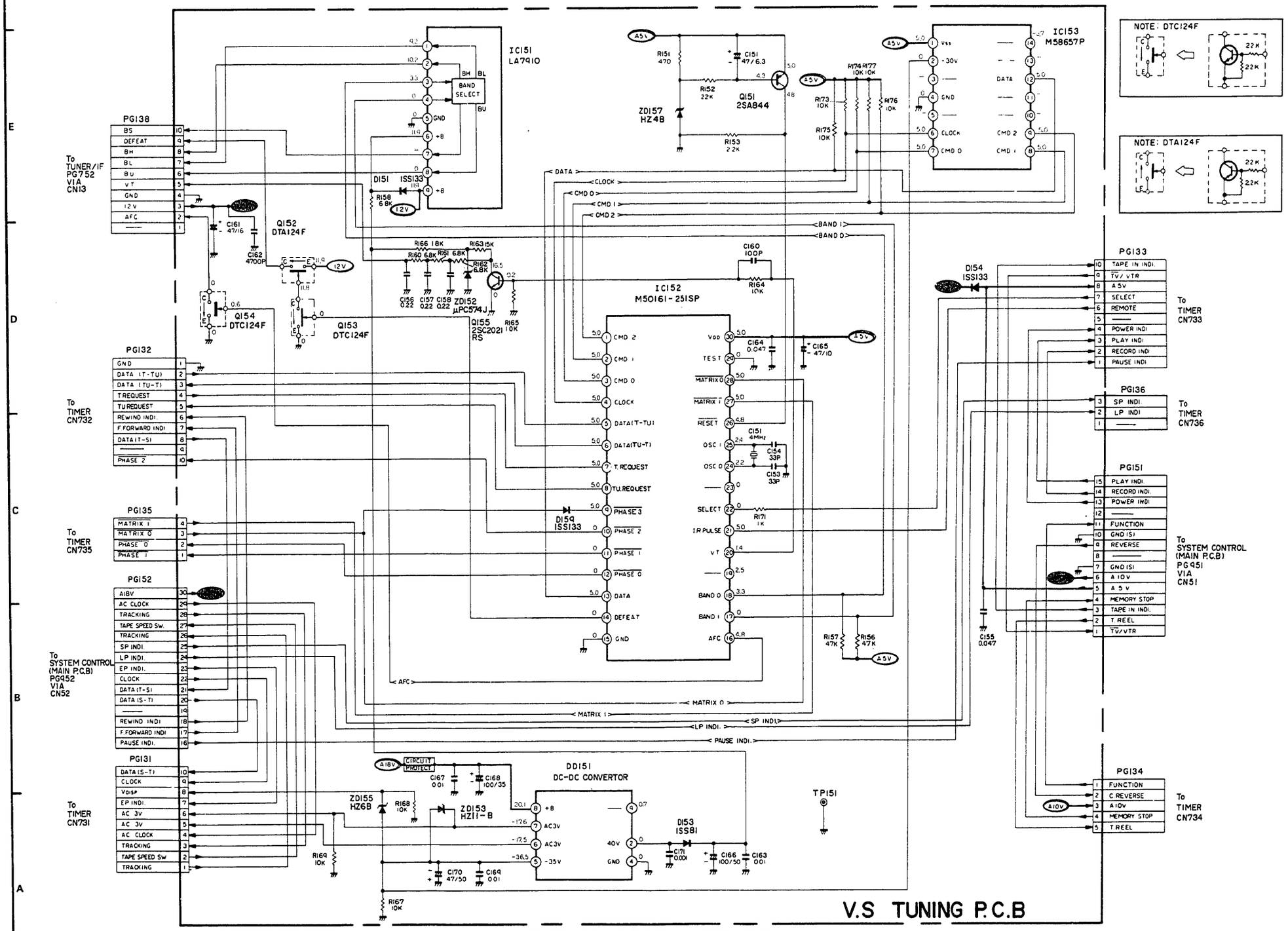


※ ONE VOLTAGE ; PB OR REC MODE. TWO VOLTAGES : PB AND(REC) MODES.



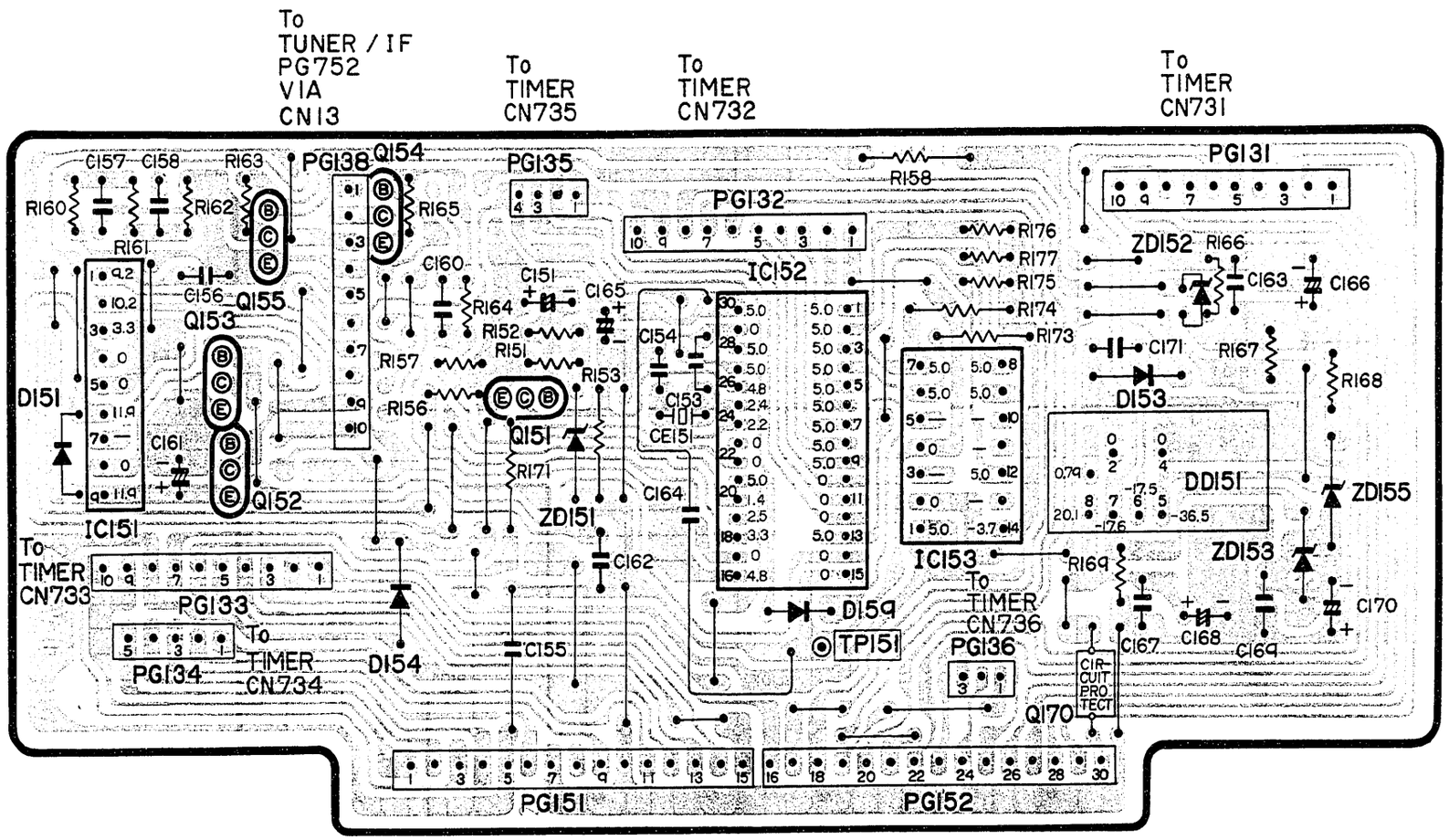
SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO – JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

V.S TUNING



V.S TUNING P.C.B

※ VOLTAGES ARE MEASURED IN STOP MODE.



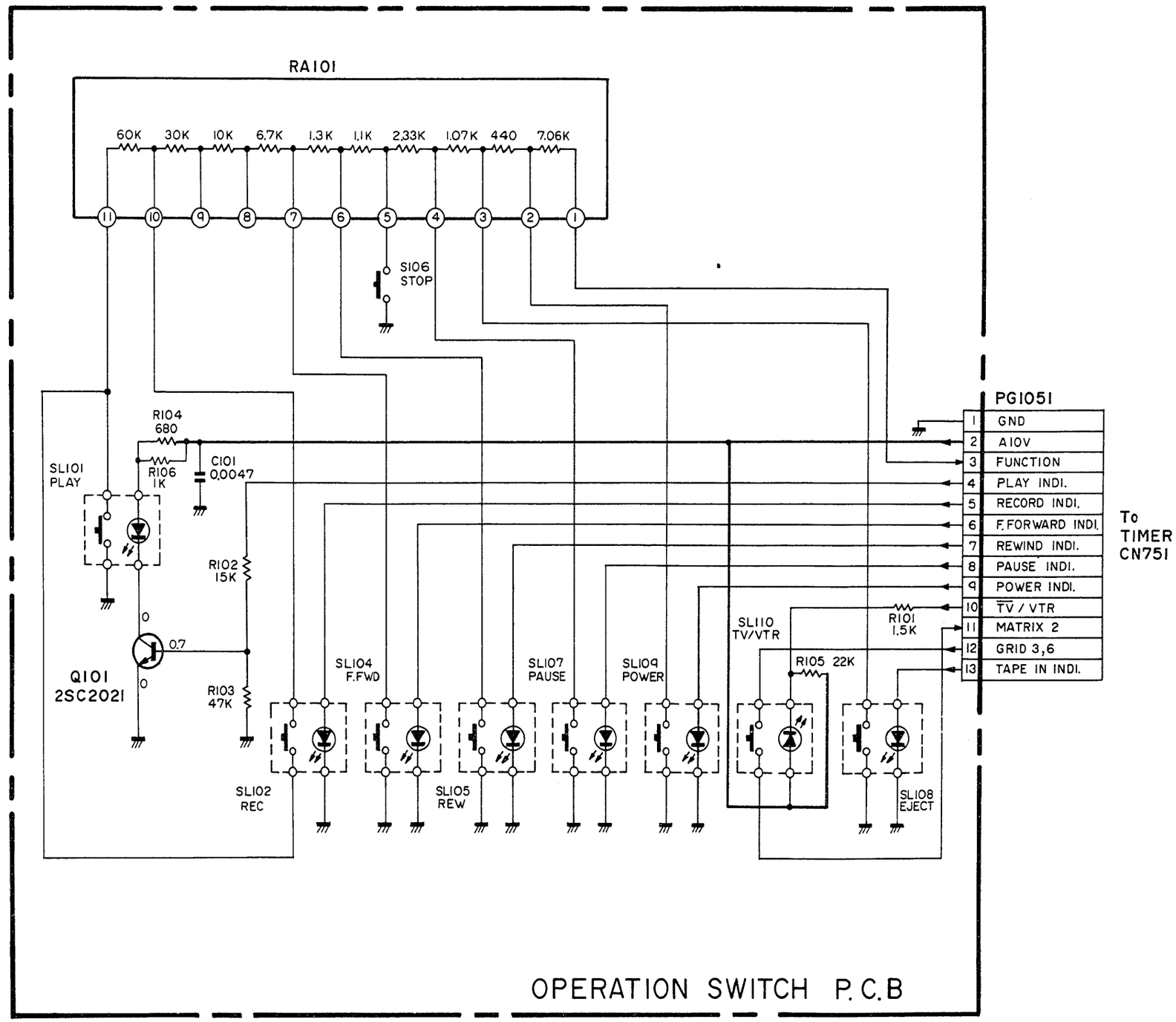
SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO - JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

To
SYSTEM CONTROL
(MAIN P.C.B)
PG951
VIA
CN51

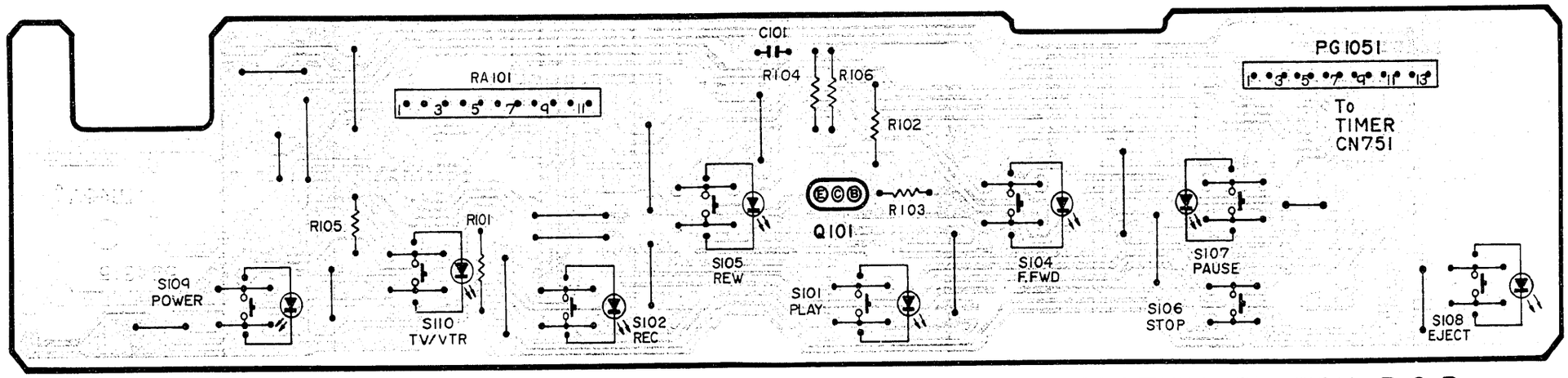
To
SYSTEM CONTROL
(MAIN P.C.B)
PG952
VIA
CN52

V.S TUNING P.C.B

OPERATION SWITCH



※ VOLTAGES ARE MEASURED IN STOP MODE.

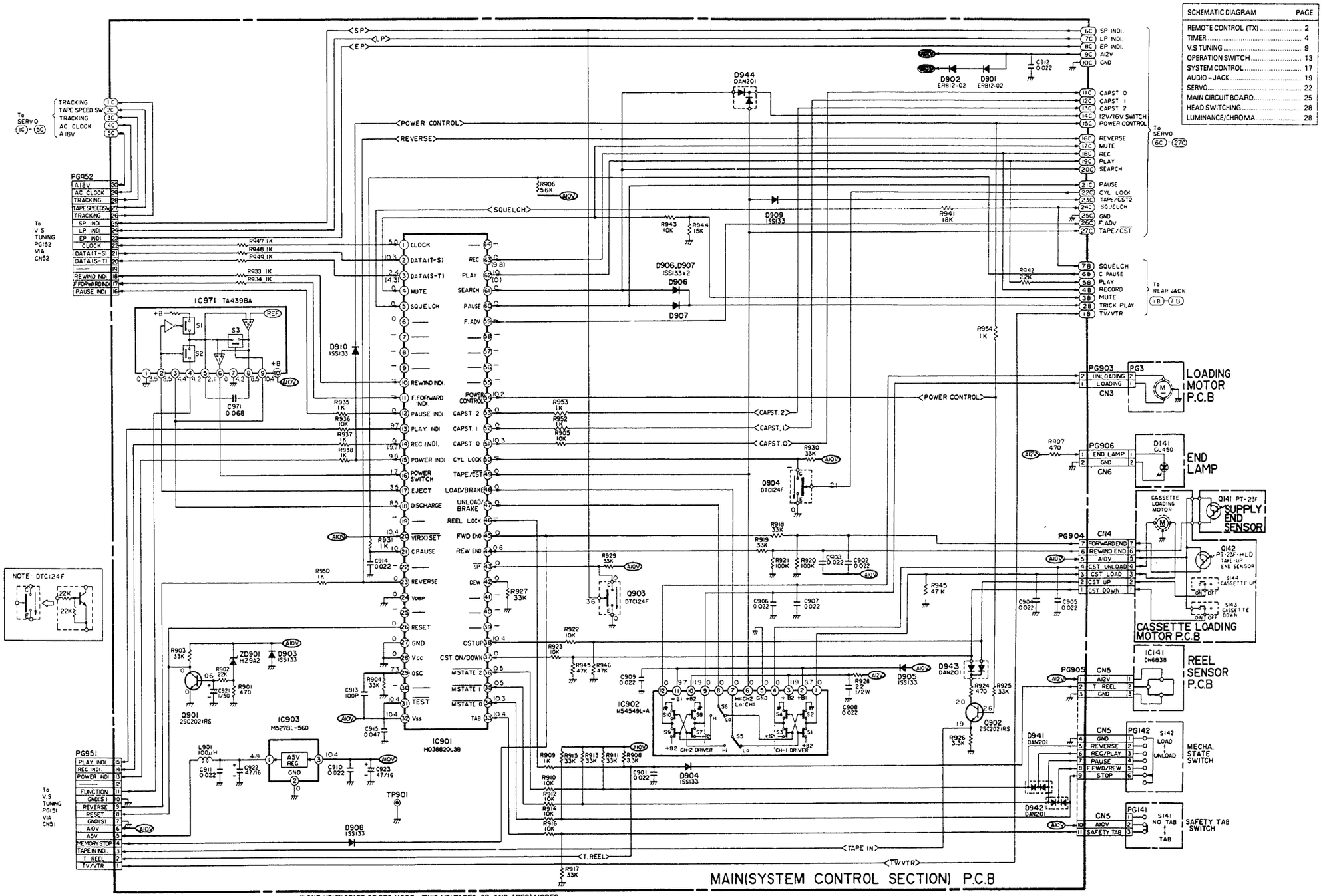


OPERATION SWITCH P.C.B

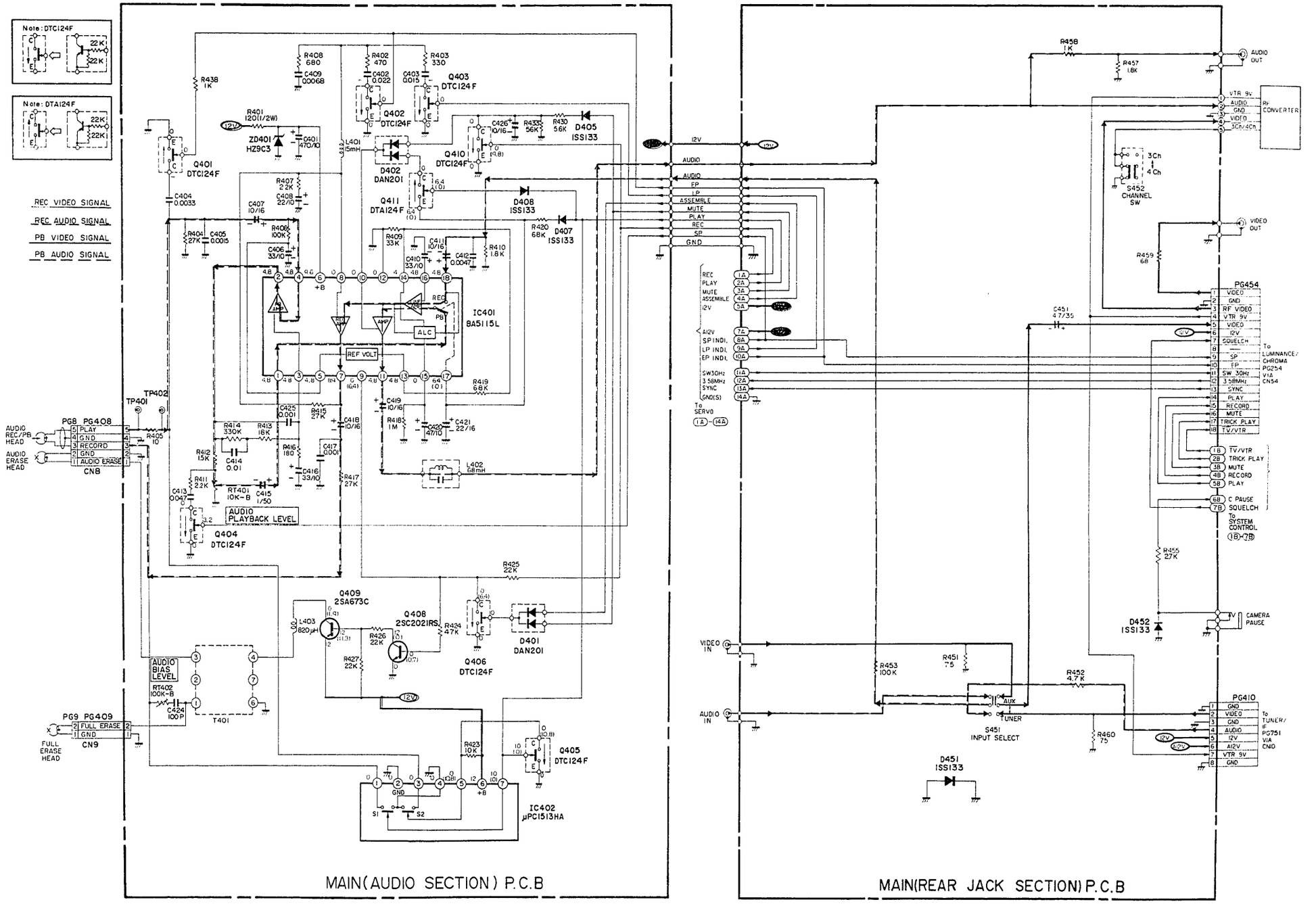
SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO – JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

SYSTEM CONTROL

SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO - JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28



AUDIO – JACK



AUDIO – JACK 19 20 AUDIO – JACK

SERV

[IC601]

① PIN ②
50 m

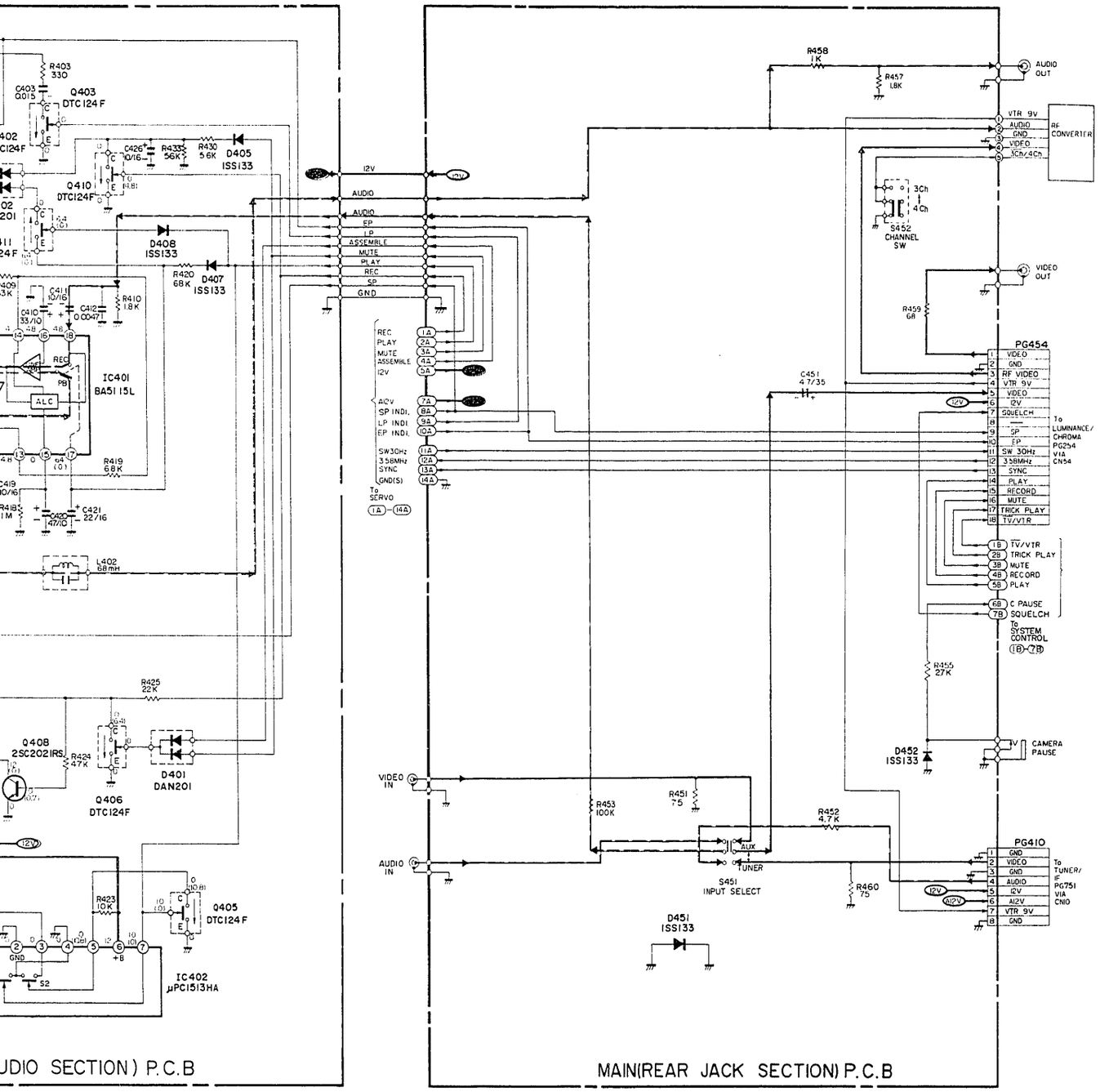
② PIN ⑦
2V/5 m

③ PIN ⑪
0.2 V/5

④ PIN ⑭
0.5V/2

[IC602]

⑤ PIN ⑦ P
1V/10 m



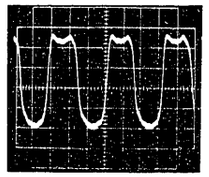
DE. TWO VOLTAGES : PB AND (REC) MODES.

3 4 5 6 7 8

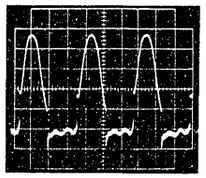
SERVO CIRCUIT WAVEFORMES

[IC601]

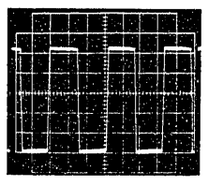
① PIN ② REC/PLAY
50 mV/5 ms. div.



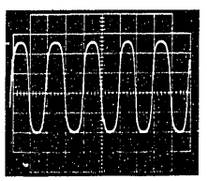
② PIN ⑦ REC/PLAY
2V/5 ms. div.



③ PIN ⑪ REC/PLAY
0.2 V/5 ms. div.

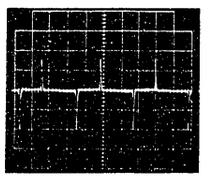


④ PIN ⑭ REC/PLAY
0.5V/2 ms. div.



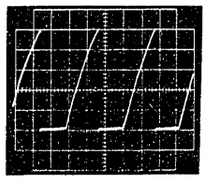
[IC602]

⑤ PIN ⑦ PLAY
1V/10 ms. div.

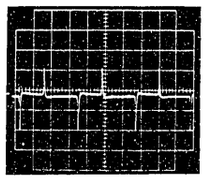


[IC604]

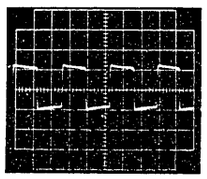
⑥ PIN ② PLAY
0.5V/5 ms. div.



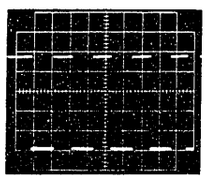
⑦ PIN ③ PLAY
1V/10 ms. div.



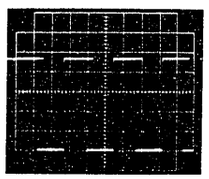
⑧ PIN ⑧ REC/PLAY
0.5V/0.5 ms. div.



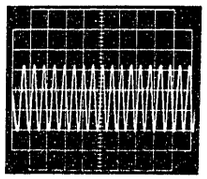
⑨ PIN ⑩ REC/PLAY
1V/0.5 ms. div.



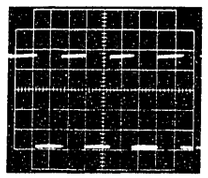
⑩ PIN ⑮ REC/PLAY
1V/50 μs. div.



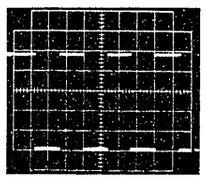
⑪ PIN ㉒ REC/PLAY
0.1V/0.5 μs. div.



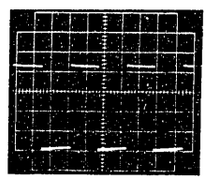
⑫ PIN ㉗ REC/PLAY
1V/0.2 ms. div.



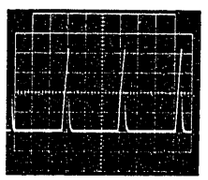
⑬ PIN ㉖ REC/PLAY
1V/0.2 ms. div.



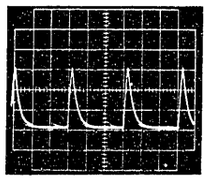
⑭ PIN ㉛ REC/PLAY
1V/10 ms. div.



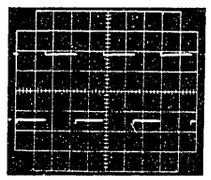
⑮ PIN ㉟ REC/PLAY
0.5V/5 ms. div.



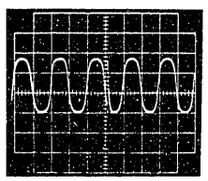
⑯ PIN ㊲ REC/PLAY
1 V/20 μs. div.



⑰ PIN ㊵ REC
1V/10 ms. div.



⑱ PIN ㊷ REC/PLAY
0.5V/2 ms. div.



SERVO

RT606 SP HEAD SWITCHING POINT

RT605 LP/EP HEAD SWITCHING POINT

RT604 SP VERT. DRIVE PULSE

RT603 LP/EP VERT. DRIVE PULSE

RT602 SP TRACKING PRESET

RT601 LP/EP TRACKING PRESET

REC/PB CYLINDER MOTOR SIGNAL

REC CYLINDER MOTOR SIGNAL

PB CYLINDER MOTOR SIGNAL

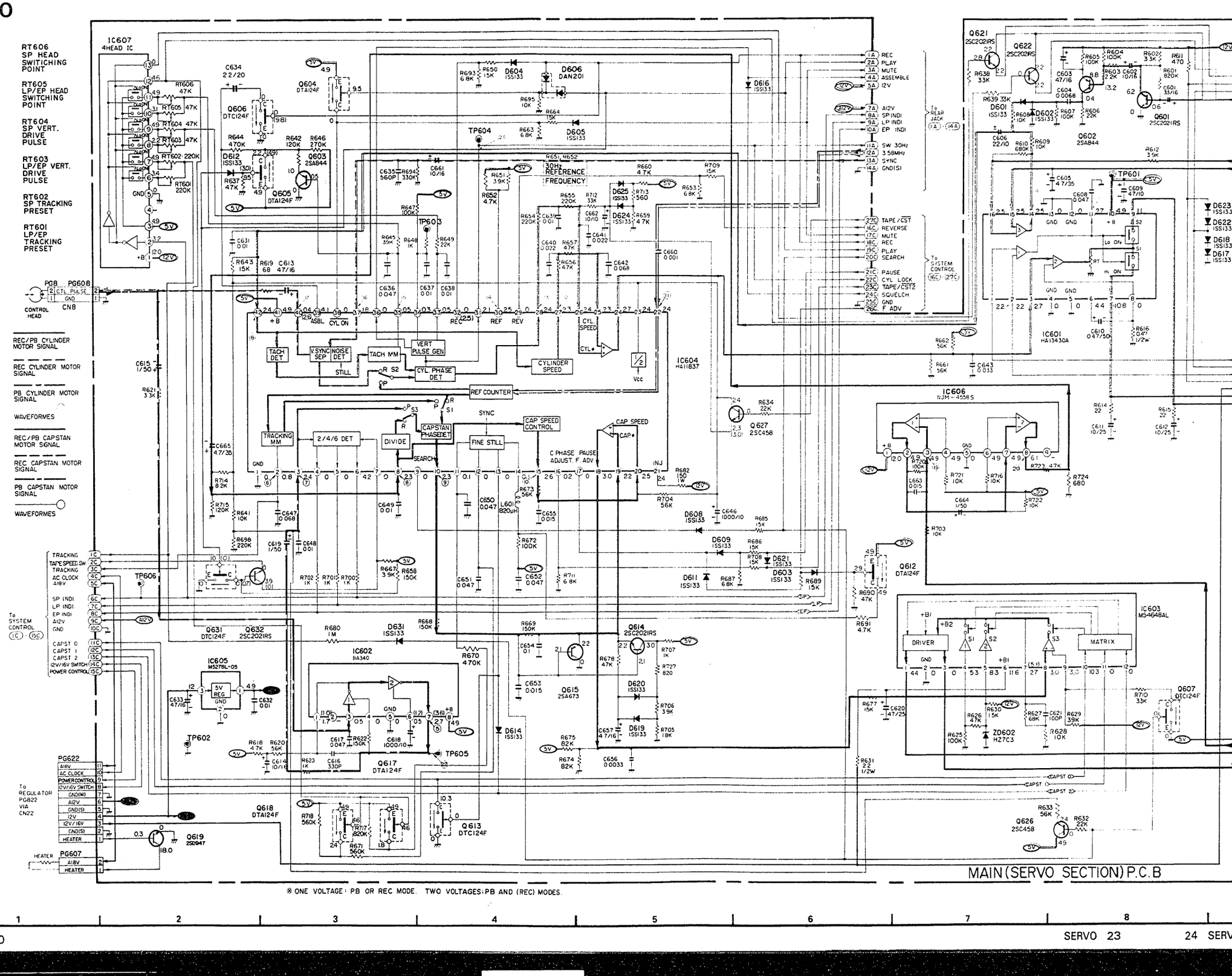
WAVEFORMES

REC/PB CAPSTAN MOTOR SIGNAL

REC CAPSTAN MOTOR SIGNAL

PB CAPSTAN MOTOR SIGNAL

WAVEFORMES

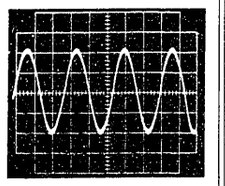


※ ONE VOLTAGE : PB OR REC MODE. TWO VOLTAGES : PB AND (REC) MODES.

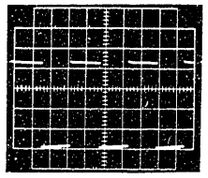
MAIN (SERVO SECTION) P.C.B

[IC606] **[TEST POINT]**

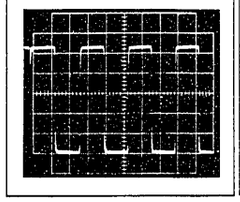
⑲ PIN ③ REC/PLAY
0.1V/0.5 ms. div.



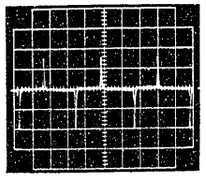
㉑ TP604 REC/PLAY
1V/10 ms. div.



⑳ PIN ⑧ REC/PLAY
0.2V/0.5 ms. div.

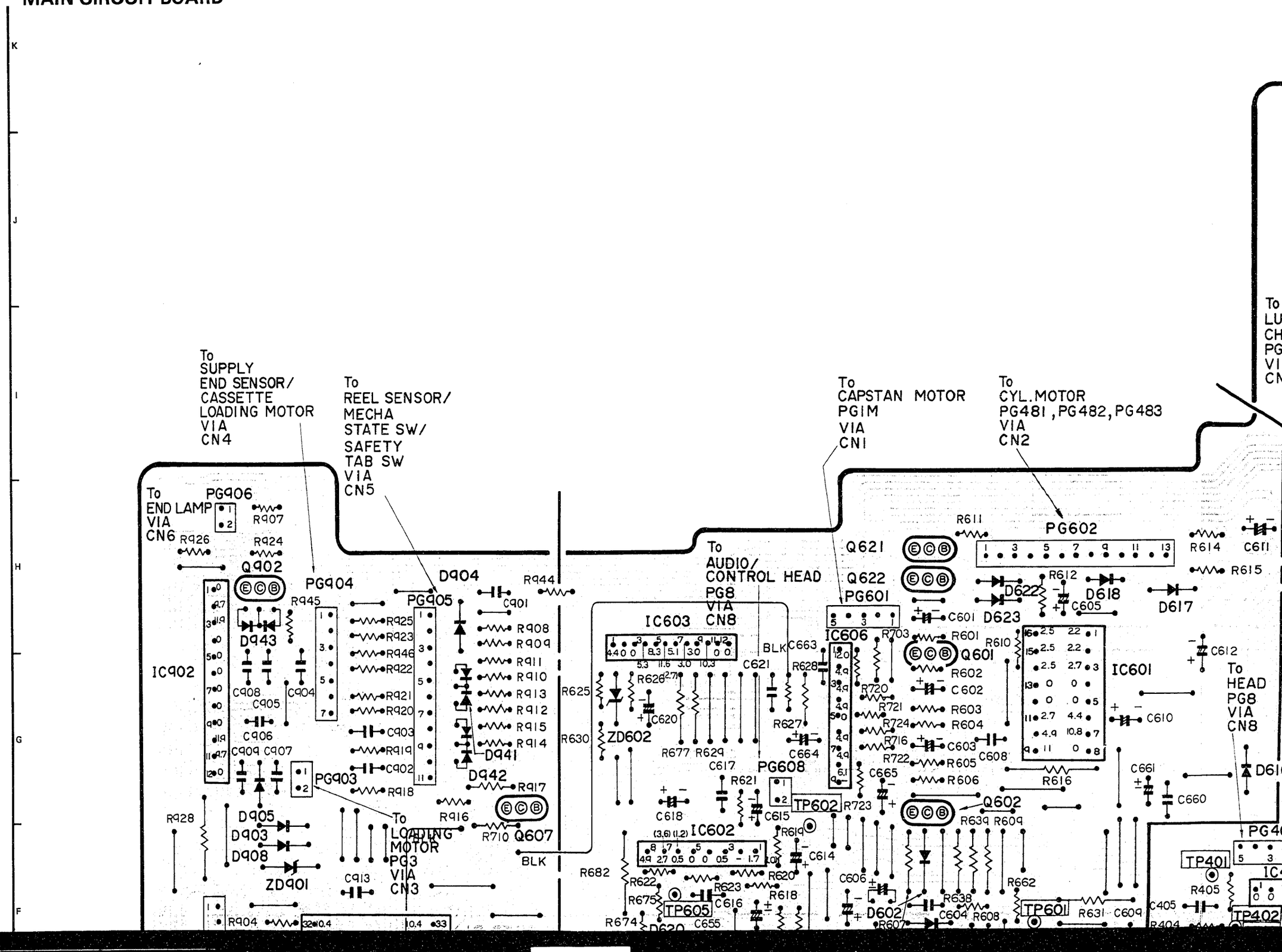


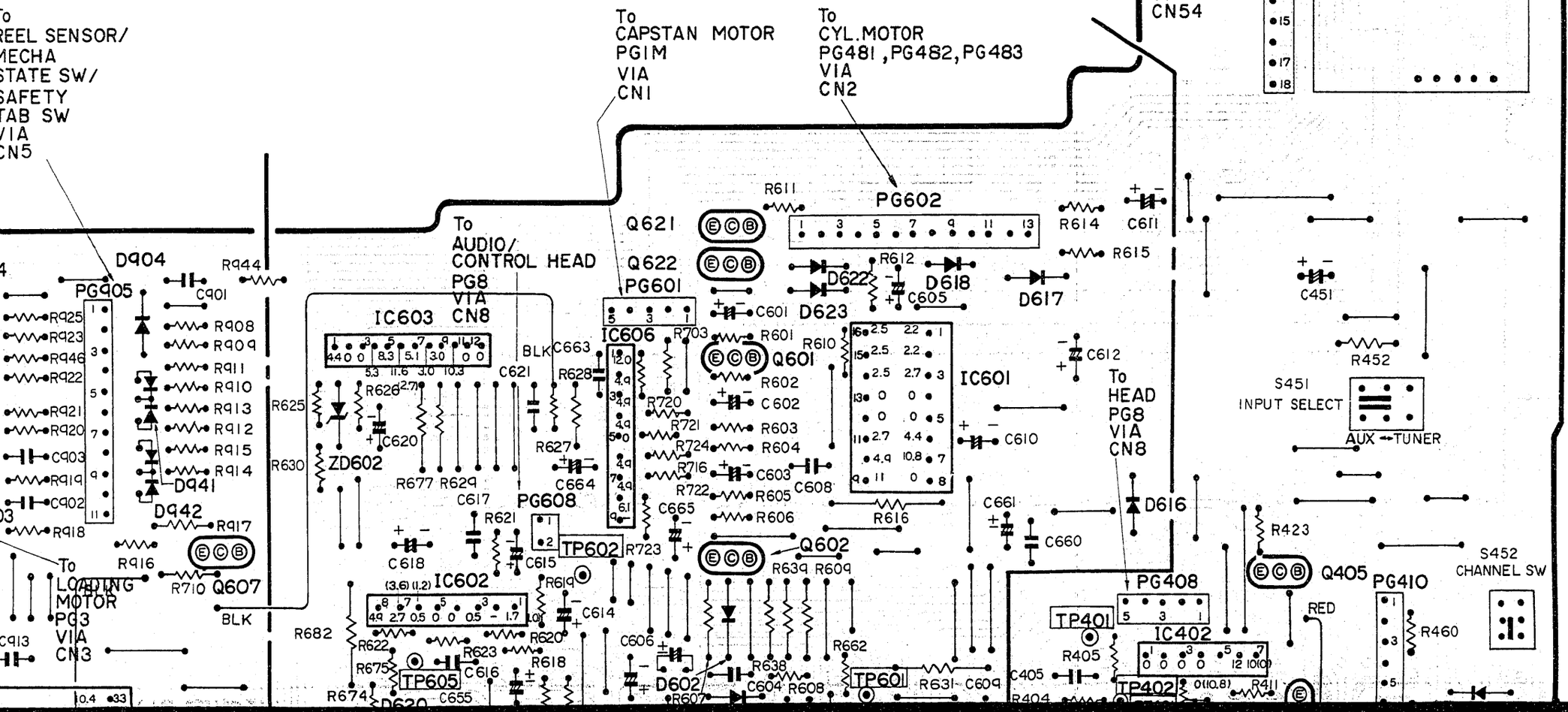
㉒ TP605 PLAY
1V/10 ms. div.

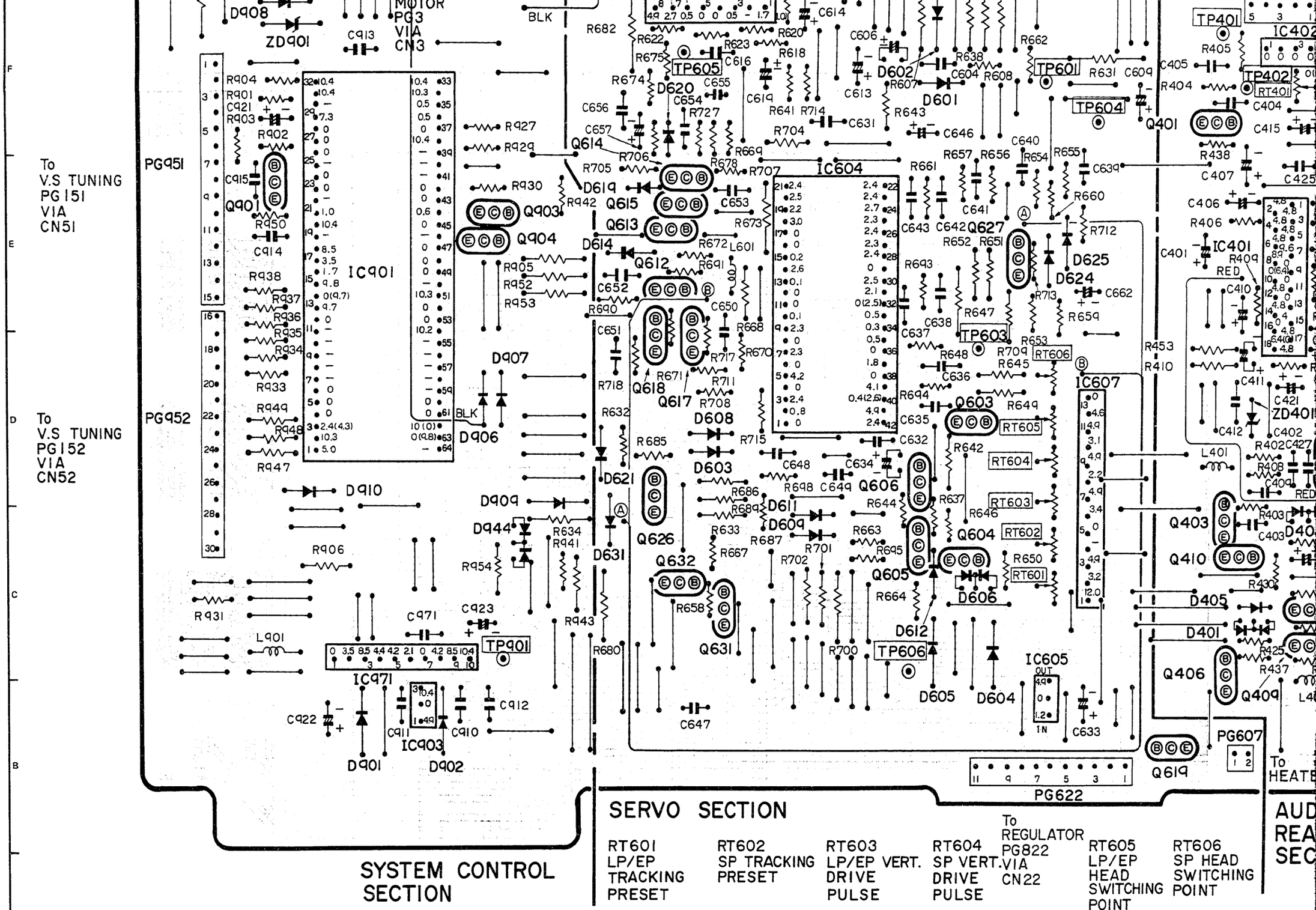


SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO – JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

MAIN CIRCUIT BOARD




To
REEL SENSOR/
MECHA
STATE SW/
SAFETY
TAB SW
VIA
CN5
To
LOADING
MOTOR
PG3
VIA
CN3
To
CAPSTAN MOTOR
PGIM
VIA
CNI
To
CYL.MOTOR
PG481,PG482,PG483
VIA
CN2
To
AUDIO/
CONTROL HEAD
PG8
VIA
CN8
R459
RF CONVERTER
PG454
To
LUMINANCE/
CHROMA
PG254
VIA
CN54
PG602
PG601
PG608
PG408
PG410
IC603
IC606
IC601
IC602
IC402
Q621
Q622
Q601
Q602
Q607
Q405
D622
D623
D618
D617
D616
D604
D941
D942
D620
D602
ZD602
TP602
TP605
TP601
TP401
TP402
S451
INPUT SELECT
AUX
TUNER
S452
CHANNEL SW
RED
BLK



SYSTEM CONTROL SECTION

SERVO SECTION

RT601 LP/EP TRACKING PRESET

RT602 SP TRACKING PRESET

RT603 LP/EP VERT. DRIVE PULSE

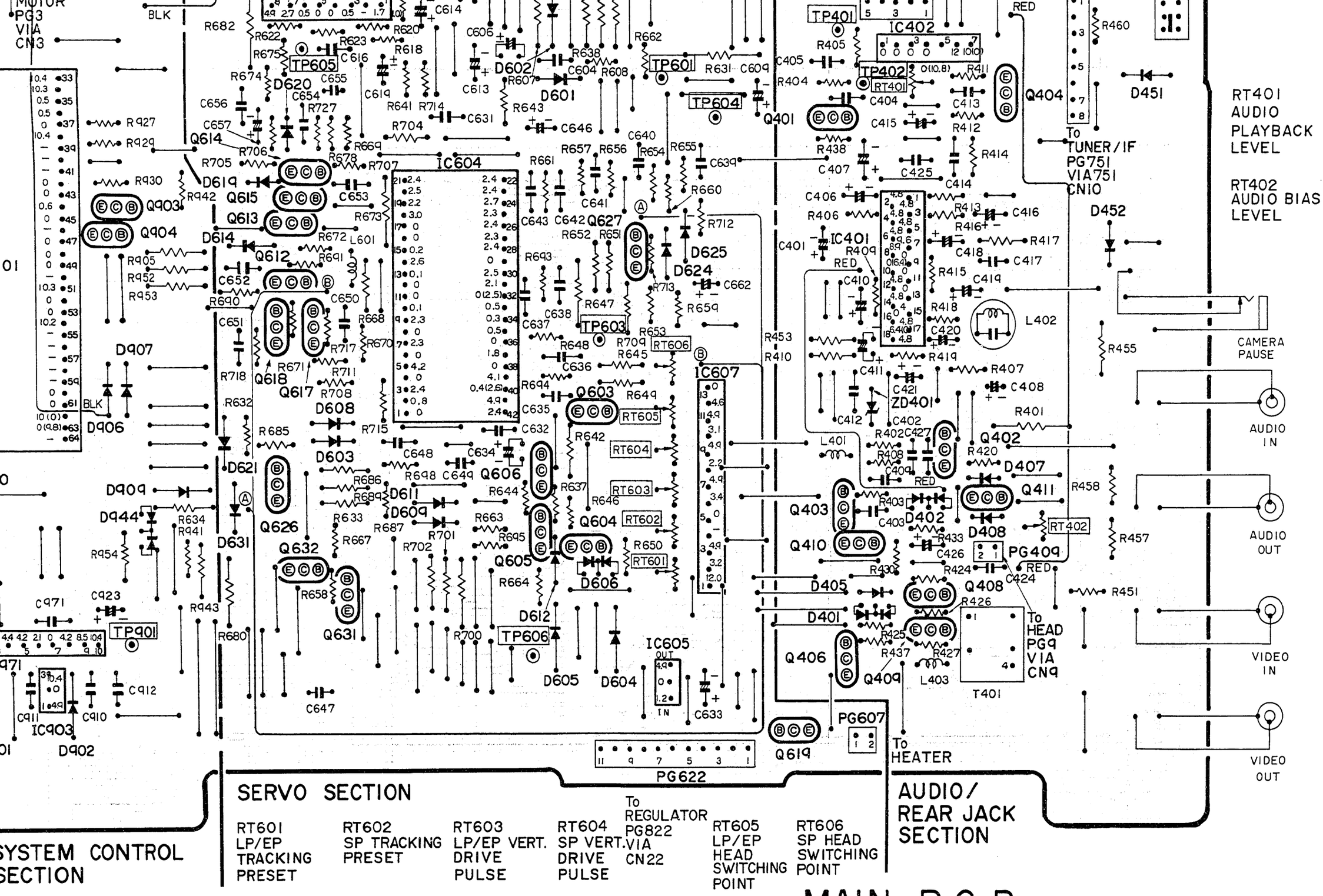
RT604 SP VERT. DRIVE PULSE

To REGULATOR PG822 VIA CN22

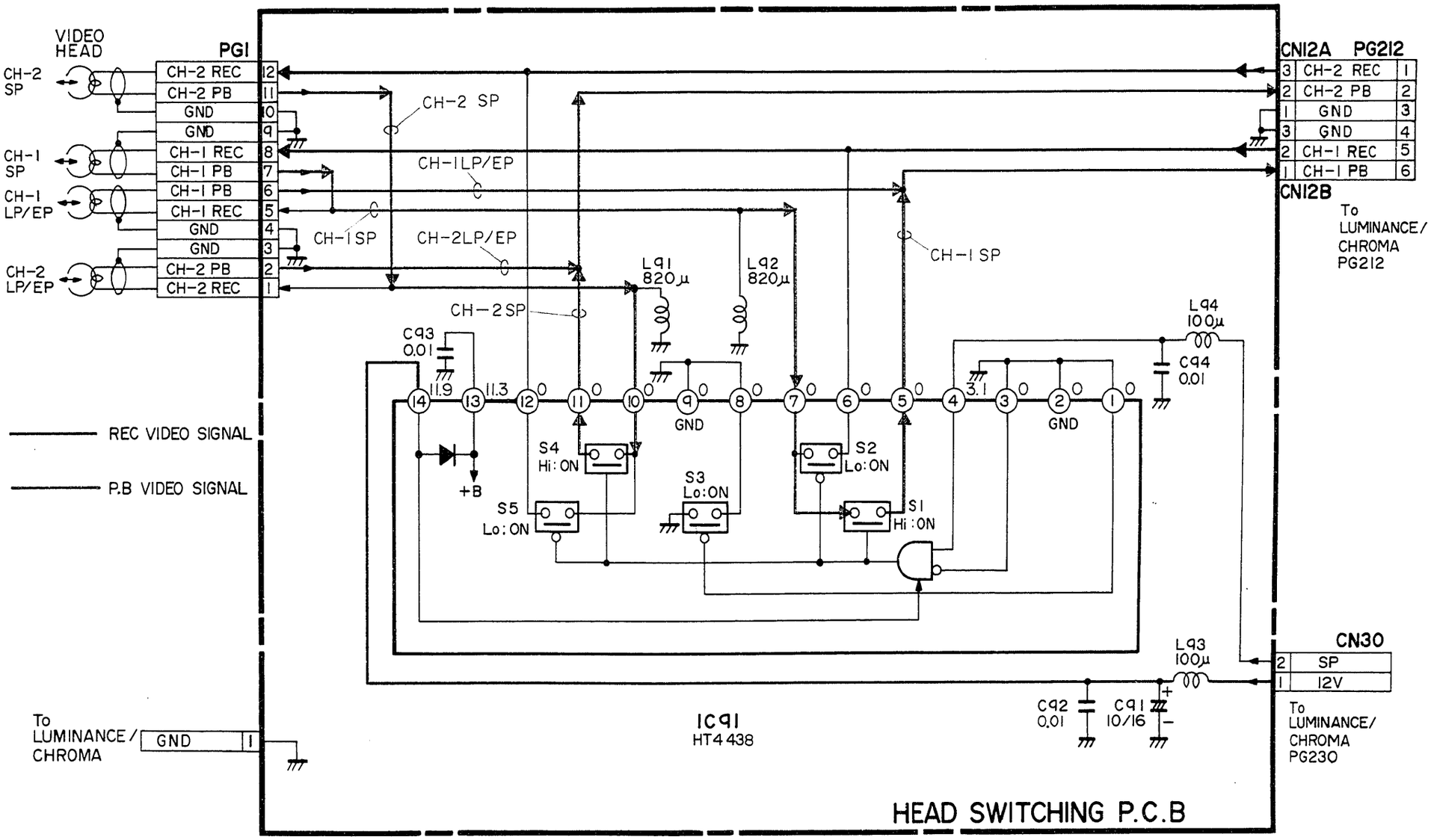
RT605 LP/EP HEAD SWITCHING POINT

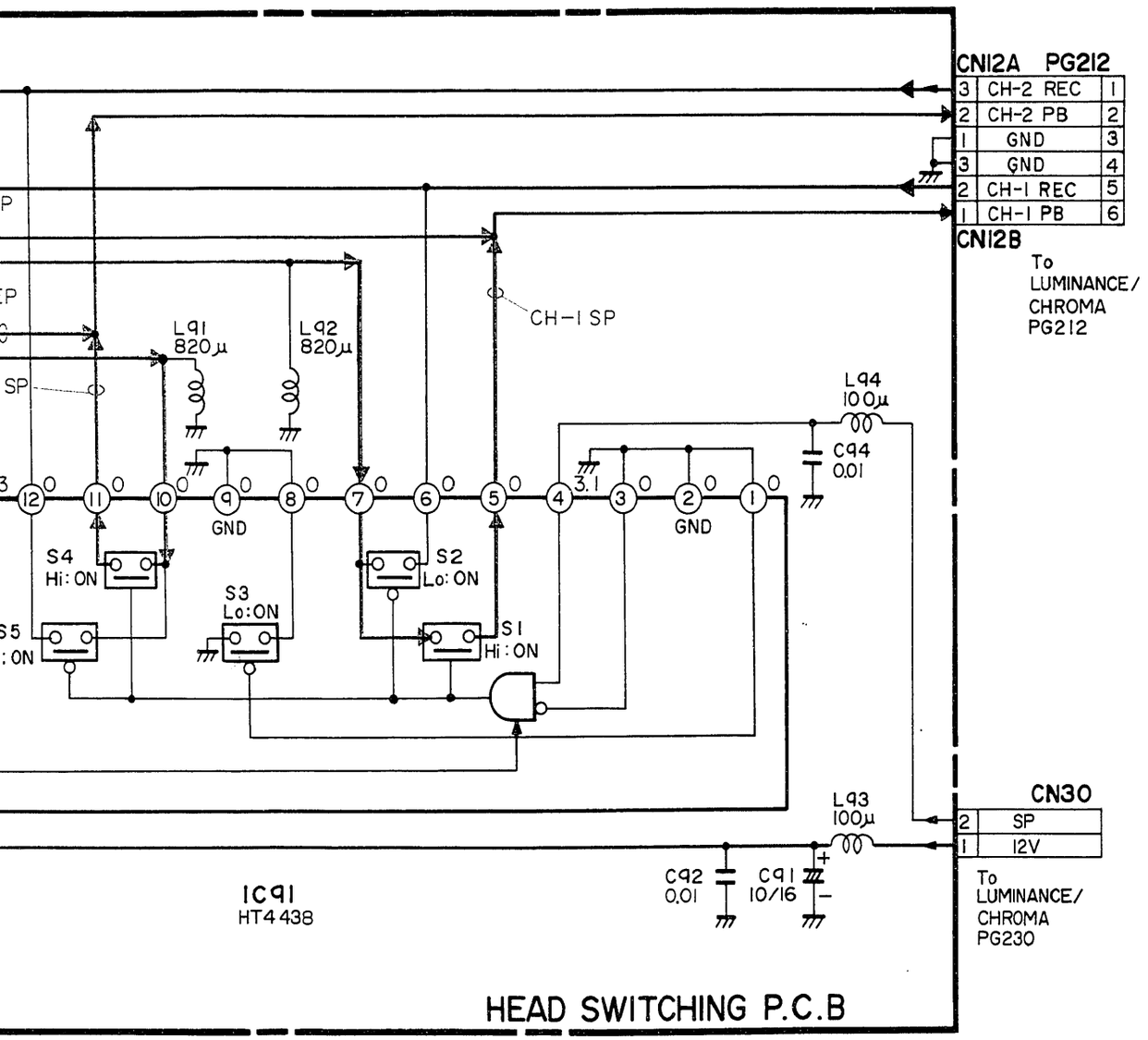
RT606 SP HEAD SWITCHING POINT

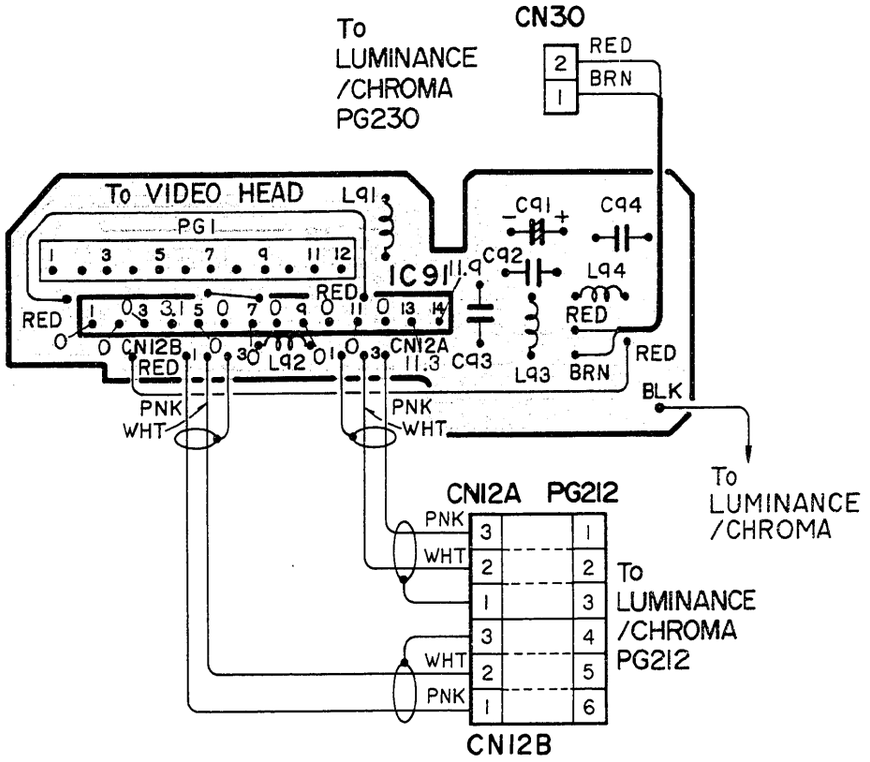
MAIN P


MOTOR PG3 VIA CN3
SYSTEM CONTROL SECTION
SERVO SECTION
RT601 LP/EP TRACKING PRESET
RT602 SP TRACKING PRESET
RT603 LP/EP VERT. DRIVE PULSE
RT604 SP VERT. DRIVE PULSE
To REGULATOR PG822 VIA CN22
RT605 LP/EP HEAD SWITCHING POINT
RT606 SP HEAD SWITCHING POINT
AUDIO/ REAR JACK SECTION
MAIN P.C.B
RT401 AUDIO PLAYBACK LEVEL
RT402 AUDIO BIAS LEVEL
To TUNER/IF PG751 VIA751 CN10
To HEAD PG9 VIA CN9
To HEATER
CAMERA PAUSE
AUDIO IN
AUDIO OUT
VIDEO IN
VIDEO OUT
IC402
IC401
IC604
IC607
IC605
IC603
TP401
TP402
TP601
TP603
TP604
TP605
TP606
TP901
PG409
PG607
PG622
T401
L402
L403
ZD401

HEAD SWITCHING







SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO – JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

LUMINANCE/CHROMA

REC VIDEO SIGNAL

REC CHROMA SIGNAL

REC LUMINANCE SIGNAL

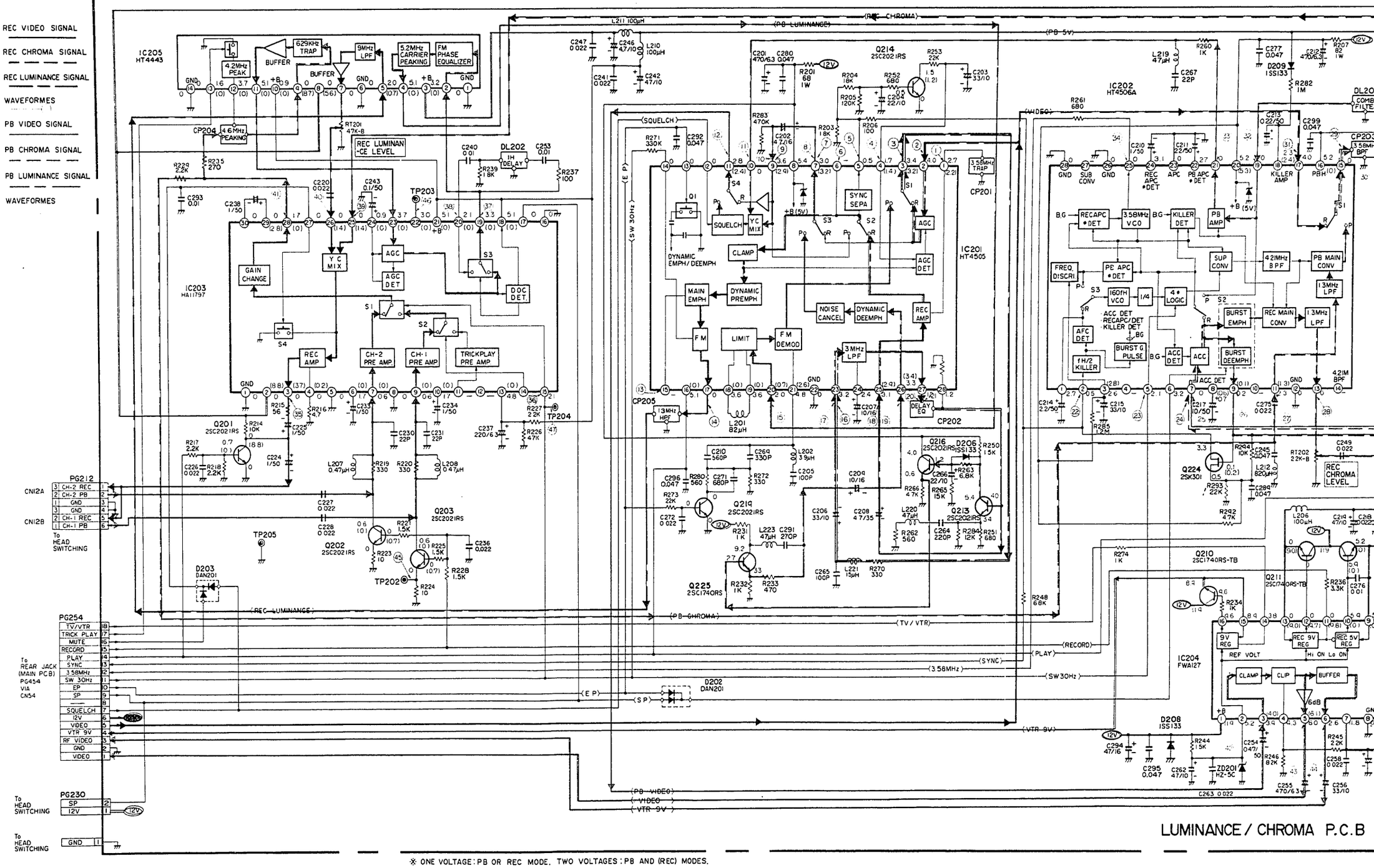
WAVEFORMES

PB VIDEO SIGNAL

PB CHROMA SIGNAL

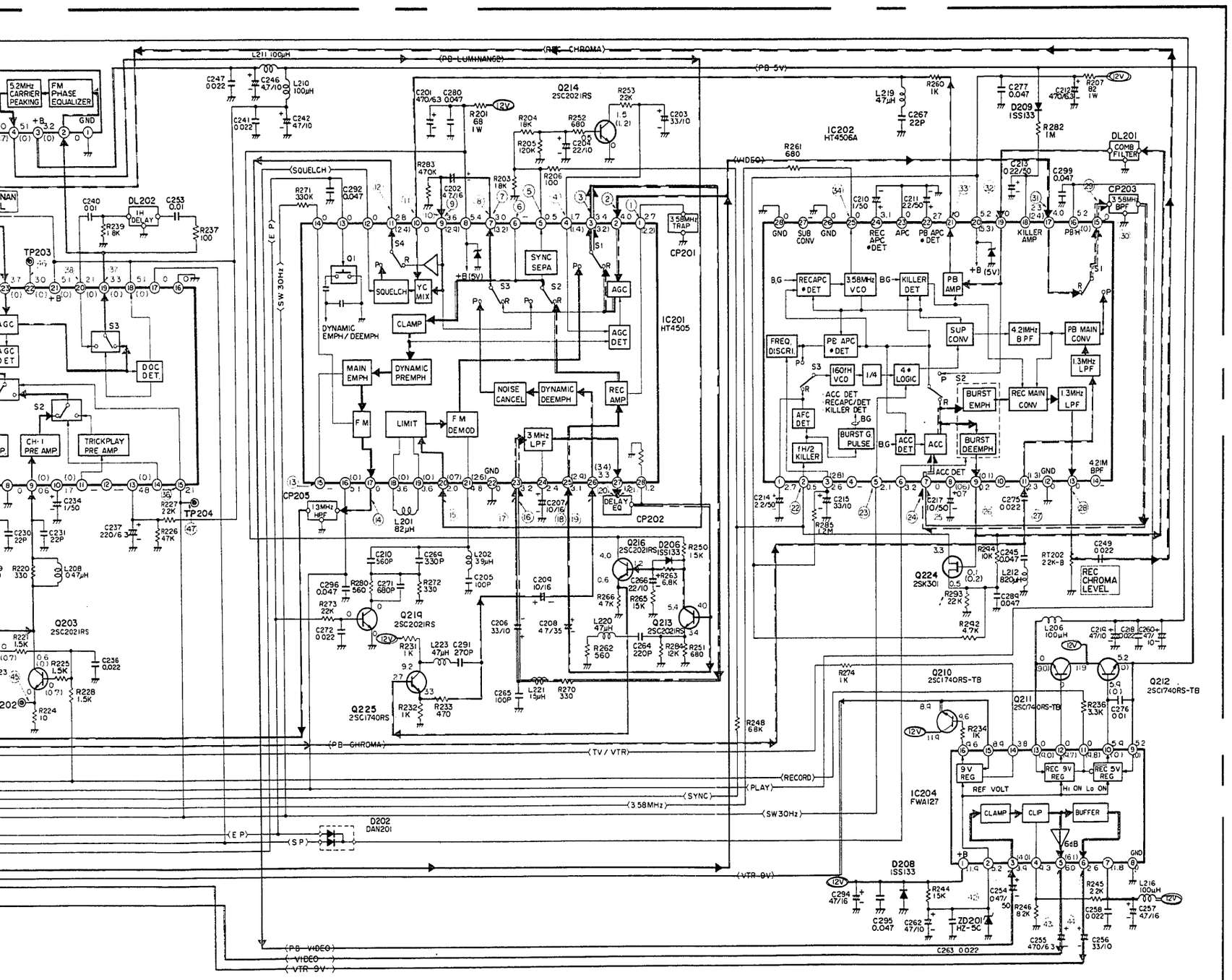
PB LUMINANCE SIGNAL

WAVEFORMES



※ ONE VOLTAGE : PB OR REC MODE. TWO VOLTAGES : PB AND (REC) MODES.

LUMINANCE / CHROMA P.C.B



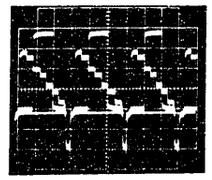
LUMINANCE / CHROMA P.C.B

※ ONE VOLTAGE : PB OR REC MODE. TWO VOLTAGES : PB AND (REC) MODES.

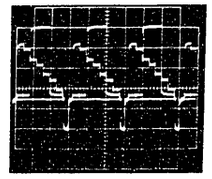
LUMINANCE/CHROMA CIRCUIT WAVEFORMES

[IC201]

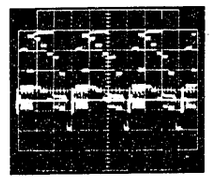
① PIN ① REC
50 mV/20 μs. div.



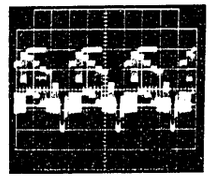
⑥ PIN ⑥ REC/PLAY
0.2V/20 μs. div.



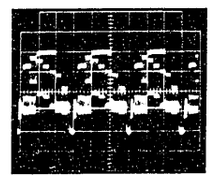
② PIN ② REC
0.2V/20 μs. div.



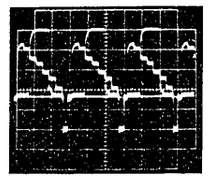
⑦ PIN ⑦ REC
50 mV/20 μs. div.



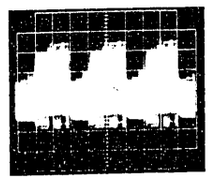
③ PIN ③ REC
50 mV/20 μs. div.



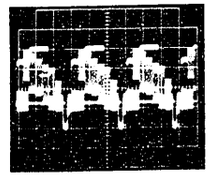
⑧ PIN ⑦ PLAY
0.2V/20 μs. div.



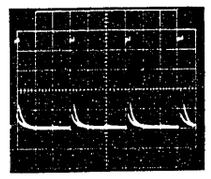
④ PIN ③ PLAY
0.1V/20 μs. div.



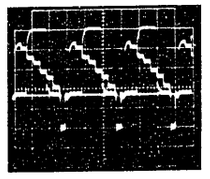
⑨ PIN ⑨ REC
50 mV/20 μs. div.



⑤ PIN ⑤ REC/PLAY
1V/20 μs. div.

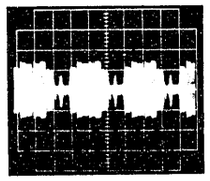


⑩ PIN ⑨ PLAY
0.2V/20 μs. div.

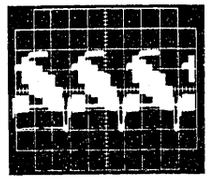


[IC201]

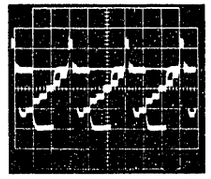
⑪ PIN ⑩ PLAY
50 mV/20 μs. div.



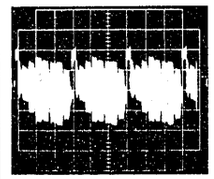
⑯ PIN ㉓ REC
50 mV/20 μs. div.



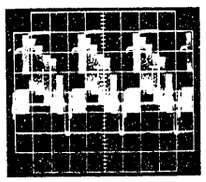
㉑ PIN ㉗ PLAY
50 mV/20 μs. div.



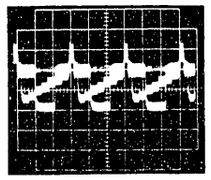
㉖ PIN ⑨ PLAY
50 mV/20 μs. div.



⑫ PIN ⑪ REC/PLAY
0.2V/20 μs. div.

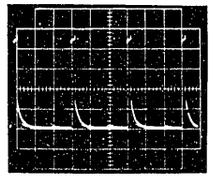


⑰ PIN ㉓ PLAY
50 mV/20 μs. div.

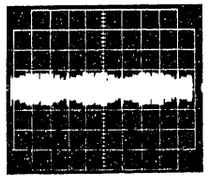


[IC202]

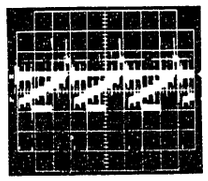
㉒ PIN ② REC/PLAY
1V/20 μs. div.



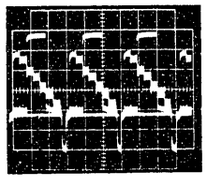
㉗ PIN ⑪ PLAY
50 mV/20 μs. div.



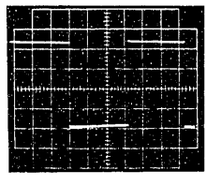
⑬ PIN ⑮ REC
0.2V/20 μs. div.



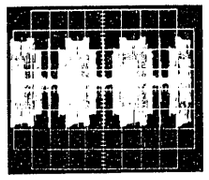
⑱ PIN ㉕ REC
50 mV/20 μs. div.



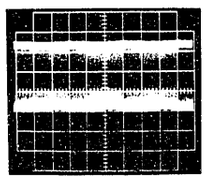
㉓ PIN ⑤ REC/PLAY
1V/5 ms. div.



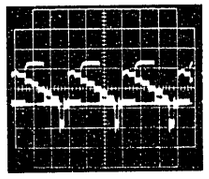
㉘ PIN ⑬ REC
0.1V/20 μs. div.



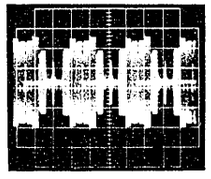
⑭ PIN ⑰ REC
0.2V/20 μs. div.



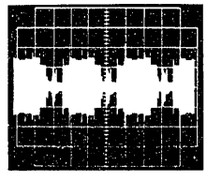
⑲ PIN ㉕ PLAY
0.1V/20 μs. div.



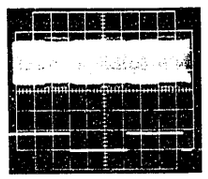
㉔ PIN ⑦ REC
50 mV/20 μs. div.



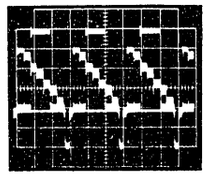
㉙ PIN ⑮ REC
50 mV/20 μs. div.



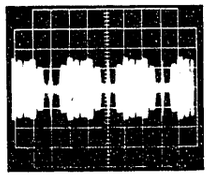
⑮ PIN ⑳ PLAY
0.2V/5 ms. div.



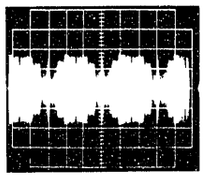
⑳ PIN ㉗ REC
50 mV/20 μs. div.



㉕ PIN ⑦ PLAY
0.1V/20 μs. div.

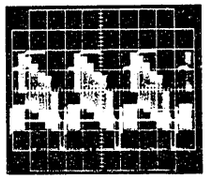


㉚ PIN ⑮ PLAY
0.1V/20 μs. div.

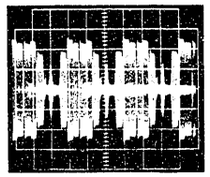


[IC202]

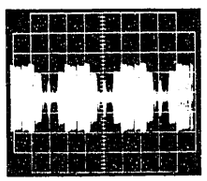
㉛ PIN ⑰ REC
0.2V/20 μs. div.



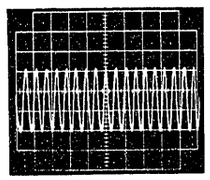
㉜ PIN ⑲ PLAY
50 mV/20 μs. div.



㉝ PIN ㉑ PLAY
1V/5 ms. div.

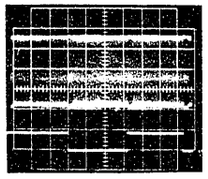


㉞ PIN ㉕ REC/PLAY
0.2V/0.5 μs. div.

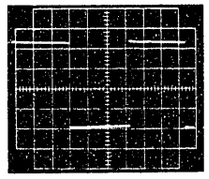


[IC203]

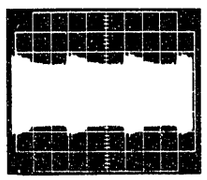
㉟ PIN ③ REC
1V/5 ms. div.



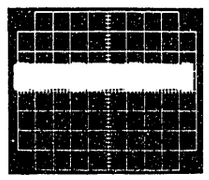
㊱ PIN ⑮ REC/PLAY
1V/5 ms. div.



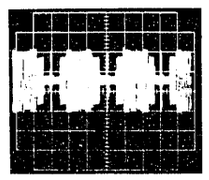
㊲ PIN ⑲ PLAY
0.1V/20 μs. div.



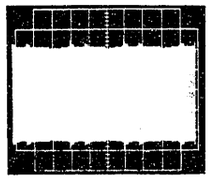
㊳ PIN ⑳ PLAY
50 mV/20 μs. div.



㊴ PIN ㉕ REC
20 mV/20 μs. div.



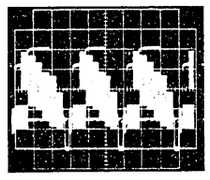
㊵ PIN ㉖ REC
0.1V/20 μs. div.



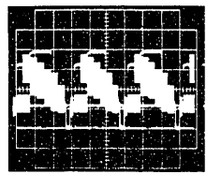
㊶ PIN ㉘ PLAY
50 mV/5 ms. div.

[IC204]

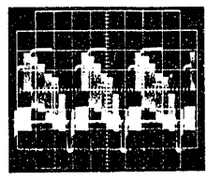
㊷ PIN ③ REC/PLAY
0.2V/20 μs. div.



㊸ PIN ⑤ REC/PLAY
0.5V/20 μs. div.

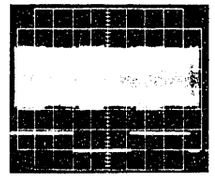


㊹ PIN ⑥ REC/PLAY
0.2V/20 μs. div.

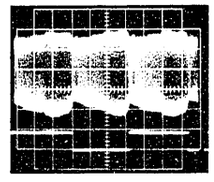


[TEST POINT]

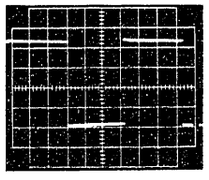
㊺ TP202 REC
50 mV/5 ms. div.



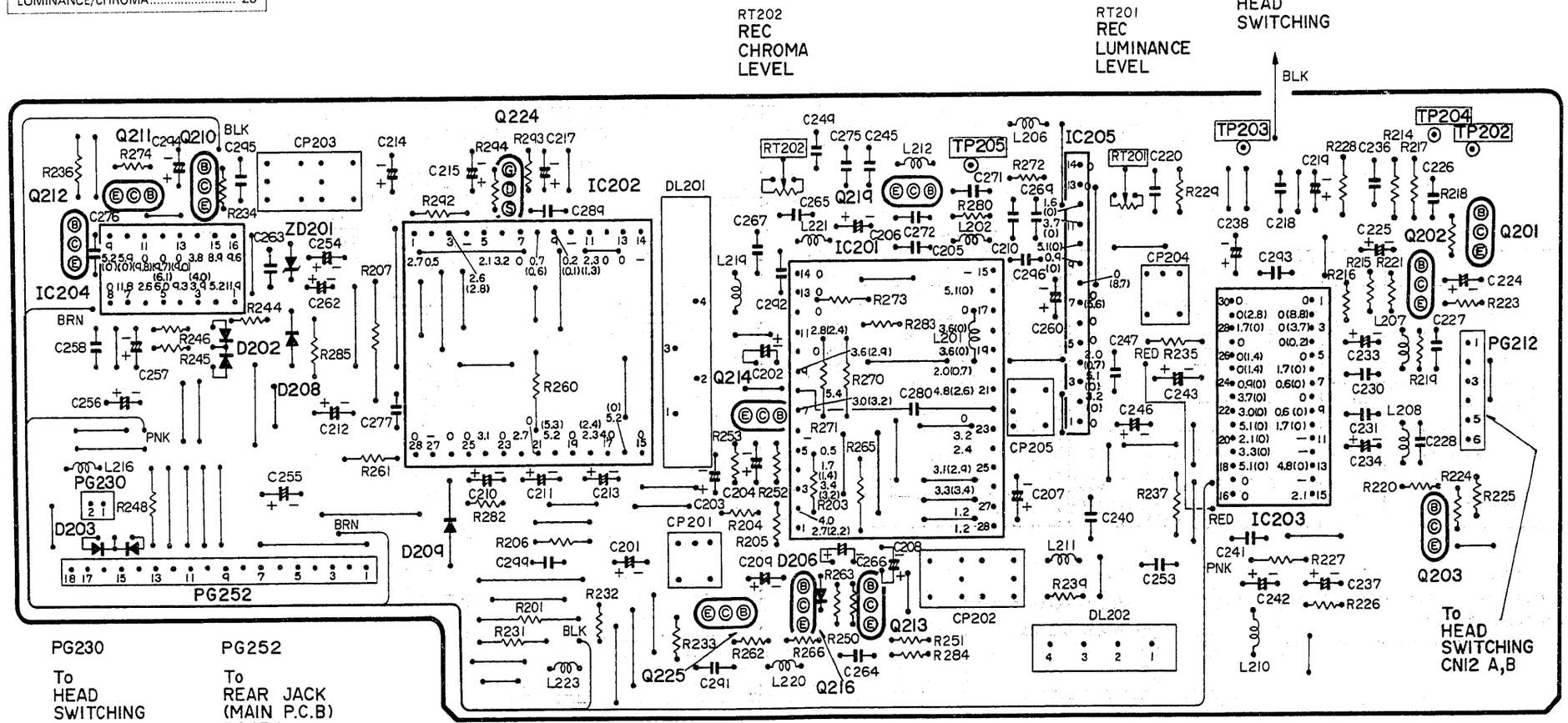
㊻ TP203 PLAY
50 mV/5 ms. div.



㊼ TP204 REC/PLAY
1V/5 ms. div.



SCHEMATIC DIAGRAM	PAGE
REMOTE CONTROL (TX)	2
TIMER	4
V.S TUNING	9
OPERATION SWITCH	13
SYSTEM CONTROL	17
AUDIO – JACK	19
SERVO	22
MAIN CIRCUIT BOARD	25
HEAD SWITCHING	28
LUMINANCE/CHROMA	28

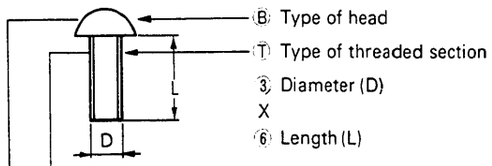


LUMINANCE /CHROMA P.C.B

EXPLODED VIEWS

SCREW CLASSIFICATION

Example: BT3 × 6



Abbreviation	Name	Shape
No symbol	Brazier head	
P	Pan head	
B	Binding head	
O	Oval countersunk head	
F	Flat countersunk head	

Abbreviation	Name	Shape
No symbol	Machine (clamps without tapping)	
t	Tapping (clamps with tapping) Type 1	
T	Tapping (clamps with tapping) Type 2	
f	Forming tight (for metal)	

Note Since the forming tight screw tightens while self-tapping. machine screws can be replaced by tapping screws.

Washers and Nuts

Abbreviation	Name	Shape
W	Washer	
SW	Spring washer	
LW	Locking washer	
E	E-ring	
N	Nut	

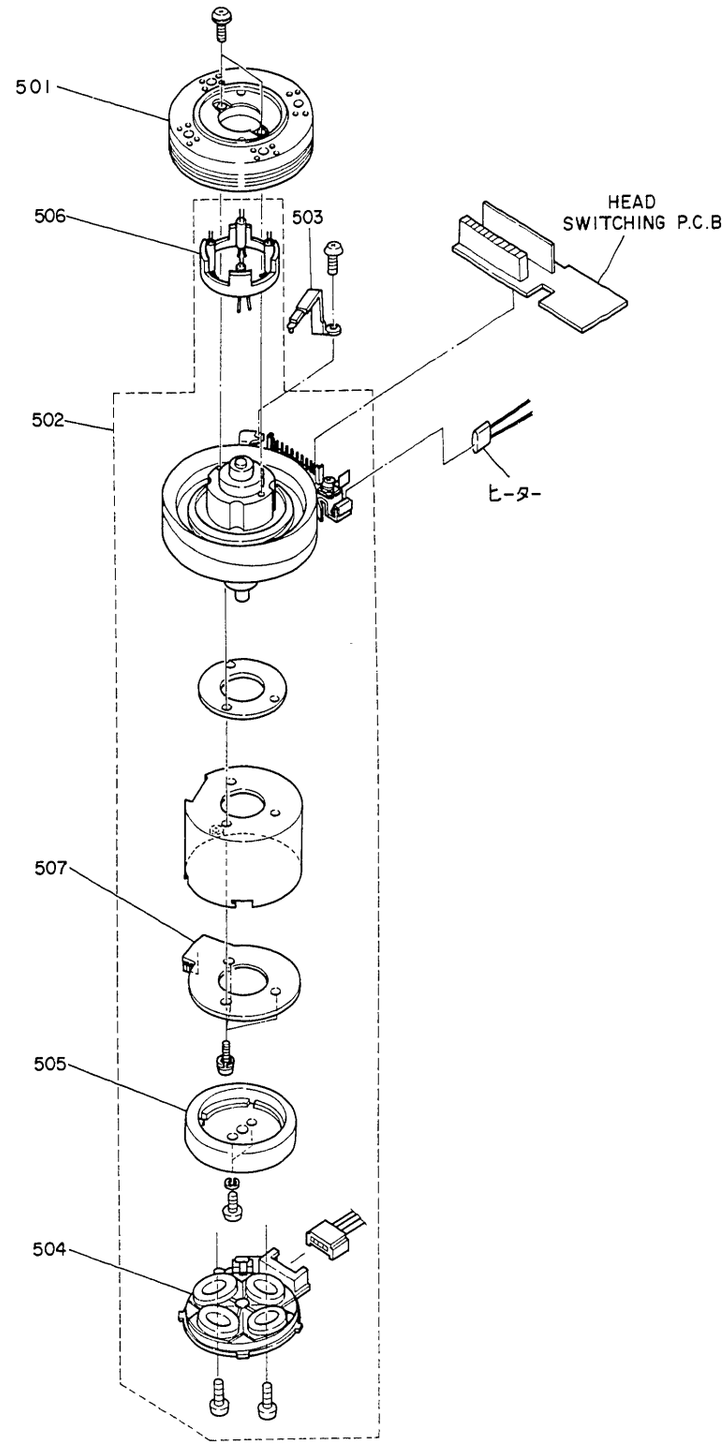
Note Internal dia is indicated for nuts and washers.

LUBRICATION

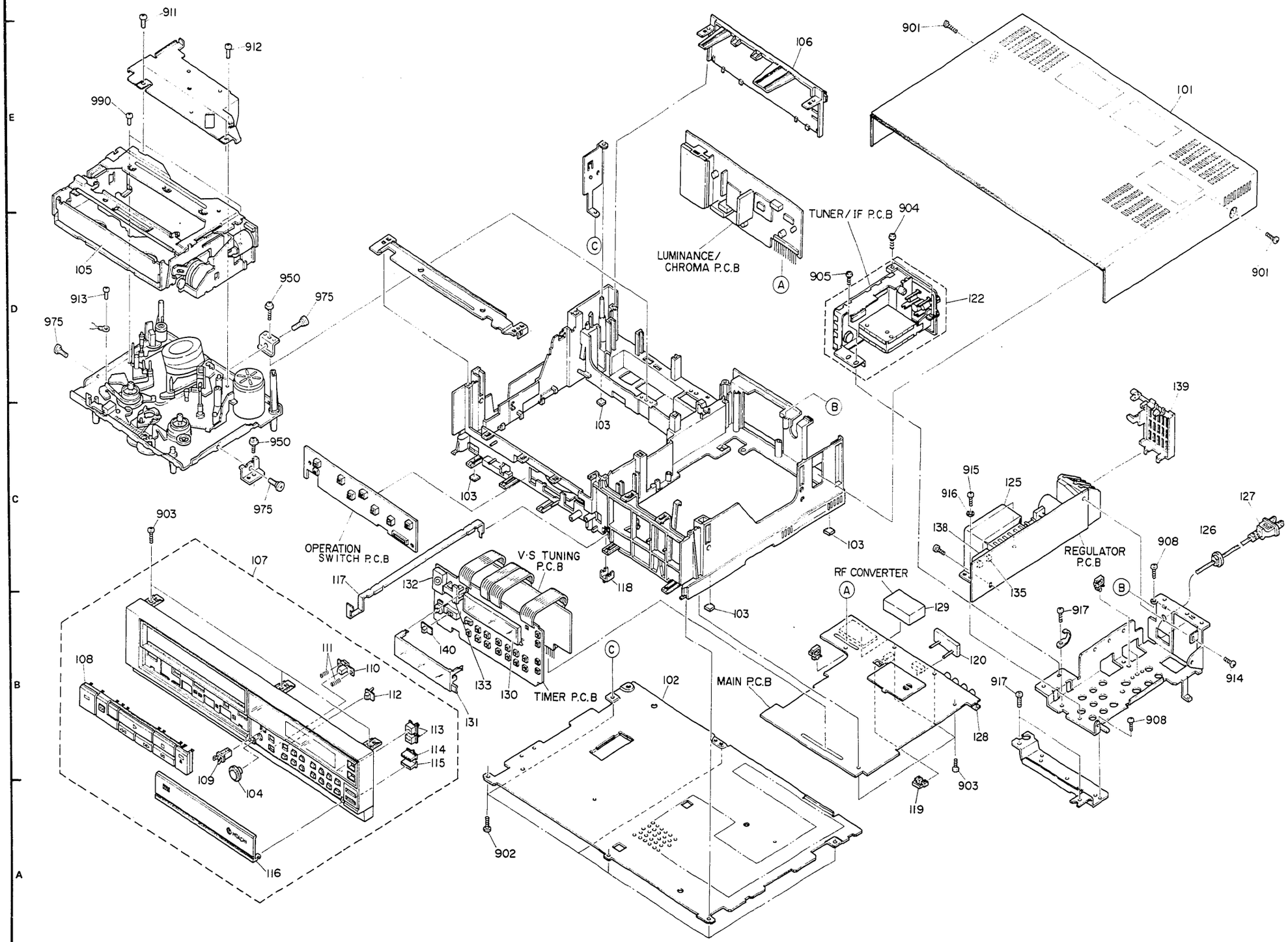
Lubrication points are shown in the exploded view diagrams by marks (Ⓢ, Ⓗ)
Lubricants shown in the diagram are as follows.

Ⓢ Sonic slider oil (≒ 1600)
Ⓗ Hitazol (MO-138)

CYLINDER MOTOR SECTION



CABINET SECTION



REPLACEMENT PARTS LIST

SYMBOL-NO	P-NO	DESCRIPTION
		CAPACITORS
C634	0250472	TANTALUM 2.2UF 20V
C657	0250473	TANTALUM 4.7 16V1
C662	0250474	TANTALUM ELECTROLYTIC CS100M-10
C791	0250155	ELECTROLYTIC 10UF 16V
C793	0250151	ELECTROLYTIC 1.0UF 50V
		RESISTORS
RA101	5378701	RESISTOR BLOCK
RT201	5007714	SEMI VARIABLE 4.7KOHM
RT202	5007713	SEMI VARIABLE 2.2KOHM
RT401	5007437	SEMI VARIABLE 47KOHM
RT402	5007436	SEMI VARIABLE 100KOHM
RT601-602	5007439	SEMI VARIABLE 22KOHM
RT603-606	5007437	SEMI VARIABLE 47KOHM
RV751	5005451	VARIABLE RESISTOR 50KOHM(B)
R201	0171015	METAL FILM RESISTOR 68 OHM +-5%1W
R207	0171016	METAL FILM RESISTOR 82 OHM +-5%1W
R616	0149705	METAL FILM RESISTOR 470 OHM
R682	0111039	OXIDE METAL FLIM 1500HM+-5% 1W
R651	0134704	COMPOSITION RESISTOR 2.2M OHM +-10% 1/2G
		SEMI-CONDUCTORS
D151	5331592	DIODE 1SS133
D153	5331501	DIODE 1SS81
D154	5331592	DIODE 1SS133
D159	5331592	DIODE 1SS133
D202-203	5331511	DIODE DAN201
D206	0575005	DIODE 1N60
D208	5331592	DIODE 1SS133
D401	5331511	DIODE DAN201
D451-452	5339021	DIODE 1SS133
D601-605	5331592	DIODE 1SS133
D606	5331511	DIODE DAN201
D608-612	5331592	DIODE 1SS133
D614	5331592	DIODE 1SS133
D616-625	5331592	DIODE 1SS133
D631	5331592	DIODE 1SS133
D751-754	5330132	DIODE 1S2076A
D759-764	5331592	DIODE 1SS133
D788	5380691	LED SLR34UR
D790-792	5380691	LED SLR34UR
D851	5330573	DIODE 1S2473
D852-853	5331931	DIODE RB401
D854	5330573	DIODE 1S2473
D901-902	5332192	DIODE ERB12-02
D903-910	5331592	DIODE 1SS133
D941-944	5331511	DIODE DAN201
D971	5331592	DIODE 1SS133
IC142	5391032	HOLEIC ON6838A
IC151	5355611	IC LA7910
IC152	5362862	IC M50161-251SP
IC153	5361071	IC M58657P
IC201	5375131	IC HT4505
IC202	5375602	IC HT4506A
IC203	5364881	IC HA11797NT
IC204	5364031	IC EWA 127
IC205	5374601	IC HT4443
IC401	5364931	IC BA5115L
IC402	5364201	IC UPC1513HA
IC601	5364911	IC HA13430A
IC602	5350901	IC BA340
IC603	5366681	IC M54646AL
IC604	5366401	IC HA11837
IC605	5364601	IC M5278L-05
IC606	5350604	IC NJM-4558S
IC607	5353031	4HEAD.IC
IC751	5302912	IC M50757-691SP
IC752	5355202	IC MPC1373HA
IC851	5353591	IC STK5451
IC901	5302883	IC MD38620L38
IC902	5364092	IC M54549L-A
IC903	5364602	IC M5279L-56
IC91	5374301	IC HT4438
IC971	5377132	IC TA4398A
QR750-751	5323561	TRANSISTOR DTC124F
QR752-754	5323561	TRANSISTOR DTC124F
Q101	5321663	TRASISTOR 2SC2021RS
Q141	5381681	PHOTO TRANSISTOR PT-23F-F
Q142	5381602	PHOTO TRANSISTOR PT-23F-MLD
Q151	5321255	TRANSISTOR 2SA844CD
Q152	5323562	TRANSISTOR DTA124F
Q153-154	5323561	TRANSISTOR DTC124F
Q155	5321663	TRASISTOR 2SC2021RS
Q170	5721602	IC PROTECTER
Q201-203	5321663	TRASISTOR 2SC2021RS
Q210-212	5323903	TRANSISTOR 2SC1740RS
Q213-214	5321663	TRASISTOR 2SC2021RS
Q216	5321663	TRASISTOR 2SC2021RS
Q219	5321663	TRASISTOR 2SC2021RS
Q224	5323704	TRANSISTOR 2SK184E
Q225	5323903	TRANSISTOR 2SC1740RS
Q401-406	5323561	TRANSISTOR DTC124F
Q407-408	5321661	TRANSISTOR 2SC2021P
Q409	5327031	TRANSISTOR 2SA673C
Q601	5321663	TRASISTOR 2SC2021RS
Q602-603	5321255	TRANSISTOR 2SA844CD
Q604-605	5323562	TRANSISTOR DTA124F
Q606	5323561	TRANSISTOR DTC124F
Q612	5323562	TRANSISTOR DTA124F
Q613	5323561	TRANSISTOR DTC124F
Q614	5321663	TRASISTOR 2SC2021RS

SYMBOL-NO	P-NO	DESCRIPTION
		SEMI-CONDUCTORS
Q615	5320593	TRANSISTOR 2SA673C
Q617-618	5323562	TRANSISTOR DTA124F
Q619	5323071	TRANSISTOR 2SD947
Q621-622	5321663	TRASISTOR 2SC2021RS
Q626-627	5320069	TRANSISTOR 2SC458CD
Q631	5323561	TRANSISTOR DTC124F
Q632	5321663	TRASISTOR 2SC2021RS
Q751	5321251	TRANSISTOR 2SA844C
Q752-753	5321663	TRASISTOR 2SC2021RS
Q756	5321663	TRASISTOR 2SC2021RS
Q901-902	5321663	TRASISTOR 2SC2021RS
Q903-904	5323561	TRANSISTOR DTC124F
ZD151	5330714	DIODE HZ4B
ZD152	5350611	IC UPC574J
ZD153	5330552	ZENNER DIODE HZ11B
ZD155	5330392	ZENER DIODE SILICON HZ6B 1MHZ 400MW
ZD201	5331017	DIODE HZ-5C3
ZD401	5330328	DIODE HZ-9C3
ZD602	5330312	DIODE-ZENER SILICON
ZD751	5330714	DIODE HZ4B
ZD901	5330325	DIODE HZ9A2
		TRANSFORMERS
T401	5262111	BIAS OSC BLOK
		COILS
L201	5152336	CHOKE COIL 82UH+-10%
L202	5159056	CHOCK COIL 3.9MH+-10%
L206	5152337	CHOKE COIL 100UH
L207-208	5152479	CHOKE COIL 0.47MICROH
L210-211	5159077	CHOKE COIL
L212	5159069	CHOKE COIL 821UH
L216	5159077	CHOKE COIL
L219	5152333	CHOKE COIL 47MH
L220	5152333	CHOKE COIL 47UH
L221	5159066	CHOKE COIL
L223	5152333	CHOKE COIL 47MH
L401	5150362	CHOKE COIL
L403	5159069	CHOKE COIL 821UH
L404	5120563	TRAP COIL 70KHZ
L751	5120964	TRAP COIL 38KHZ
L852	5152337	CHOKE COIL 100UH
L901	5152472	CHOKE COIL 100MICROH
L91-92	5152349	CHOKE COIL 821UF
L93-94	5152337	CHOKE COIL 100UH
		CRYSTALS
X751	5760791	XTAL

SYMBOL-NO	P-NO	DESCRIPTION
		MISCELLANEOUS
CE151	5701121	XTAL
CN731-732	5663715	FLAT CABLE 10P
CN733	5663716	FLAT CABLE 6P
CP201	5123631	TRAP FILTER
CP202	5102322	DELAYLINE
CP203	5102363	BAND PASS FILTER
CP204	5123637	TRAP COIL
CP205	5102356	HIGH PASS FILTER
DD801	5262061	DC-DC CONVERTOR
DL201	5765711	DELAY LINE
DL202	5765071	DELAY LINE
FU651-652	5721406	FUSE 125V 2A
FU653	5721406	FUSE
PD751	5381502	DIODE MP-5FR3
PJ131-133	5664929	PLUG
S101	5634585	SWITCH
S102	5634584	SWITCH
S104-105	5634584	SWITCH
S106	5655061	SWITCH
S107	5634584	SWITCH
S108	5634585	SWITCH
S109-110	5634584	SWITCH
S143-144	5633362	PUSH SWITCH
S451	5633511	PUSH SWITCH
S452	5622562	SWITCH
S751-762	5633911	SWITCH
S781-785	5633911	SWITCH
S791	5622193	SLIDE SWITCH
S792	5624455	SWITCH
		FOR FINAL ASSEMBLY
101	6046534	TOP COVER
102	7387644	BOTOM COVER
103	7741444	FELT (LEG)
104	6076201	TRACKING KNOB
105	6644739	CASSETTE DOOR
106	6209539	REAR CASE
107	6237261	FRONT PANEL ASSEMBLY
108	6081211	BUTTON ASSEMBLY
109	6023691	HOLDER
110	6081312	INPUT BUTTON
111	6520992	SPRING
112	6076181	SLIDE KNOB
113	6061321	CH. BUTTON
114	6081351	INT. BUTTON
115	6081532	IRT. BUTTON
116	6166632	TIMER DOOR
117	7391203	LEVER
118	6862253	HOLDER
119	6662262	SWITCH PIECE

SYMBOL-NO	P-NO	DESCRIPTION
		FOR FINAL ASSEMBLY
120	6862271	SWITCH COVER
122	5586244	VTR FRONTEND
125	5213663	POWER TRANSFOMER
126	6794591	BUSHING
127	5746492	POWER CORD
128	5672241	JACK PLATE
129	5587431	RF CONVERTOR
130	5311471	TIMER DISPLAY
131	6882462	HOLDER (TIMER DISPLAY)
132	6660641	HOLDER
133	6885612	LED HOLDER
135	5722214	FUSE HOLDER
138	6753912	FUSE COVER
139	6862214	COVER
140	6076191	SLIDE KNOB
202	6414654	SUPPLY REEL ASSEMBLY
203	6414674	TAKE-UP REEL ASSEMBLY
204	6871651	IC HOLDER
206	7767412	WASHER
207	7778659	POLYSLIDER WASHER
208	6865662	BRAKE ARM
209	7366041	TENSION ARM
210	6865604	BRAKE L
211	6865612	BRAKE R
212	6302471	SPRING
213	6543664	SPRING
214	7376271	TENSION BAND
215	6579421	BT.SPRING HOLDER
216	7366002	ARM BRACKET
217	6666971	FR ARMASSEMBLY
218	7376303	LOADING LINK R ASSEMBLY
219	7376313	LOADING LINK L ASSEMBLY
220	6978501	GUIDE ROLLER BASE (I)
221	6976291	GUIDE ROLLER BASE (O)
224	6669451	GUIDE ROLLER
225	6666061	GUIDE ROLLER ASSEMBLY (OUT)
226	7366892	GUIDE BASE HOLDER
229	7570671	TAPE GUIDE (I)
230	6304903	SPRING
231	6679902	IMPEDANCE ARM ASSEMBLY
232	5447631	FE HEAD
233	6302391	SPRING
234	5447622	AUDIO CONTROL HEAD
235	6304906	SPRING
236	7766245	WASHER
237	6679952	SUB BRAKE
238	6306304	SPRING
239	5578151	CAPSTAN MOTOR
240	6665675	RECORDING PREVENTION ARM

SYMBOL-NO	P-NO	DESCRIPTION
241	5633971	SWITCH (S141)
242	7768143	POLYSLIDER WASHER
243	6977813	PRESSURE ROLLER ASSEMBLY
245	7360942	HOLDER (HEATER)
246	6547811	SPRING
247	6579041	X-ADJUST SCREW
248	5625091	SLIDE SWITCH
250	6873291	COLOR
251	7571671	TAPE GUIDE (O)
252	6873721	CAP
255	6877521	COLLAR
256	6538171	SPRING
301	6879515	CLATCH PLATE ASSEMBLY
302	6355561	BELT
303	7366971	BRAKE SLIDER
304	6865733	MODE SLIDER
305	6547621	SPRING
306	6879484	LORDING GEAR ASSEMBLY
307	6865741	TENTION ARM
311	7366931	LOADING MOTOR ASSEMBLY
312	6356111	BELT
313	6356091	BELT
314	6979651	FLY-WHEEL
315	7760142	POLYSLIDER WASHER (THRUST)
316	7768661	WASHER
317	6356101	BELT
318	6356081	BELT
319	7360833	FLYWHEEL HOLDER
320	6869291	PULLEY
321	7778659	POLYSLIDER WASHER
322	6355561	BELT
323	0249696	HEATER
401	7390868	X FLONT LORDING MECHA,ASSEMBLY
404	7366612	CASSETTE HOLDER
412	7366732	MOTOR BLOCK ASSEMBLY
414	5961671	FL,MOTOR ASSEMBLY
417	6879102	LOADING GEAR ASSEMBLY (R)
423	6679092	LOADING GEAR ASSEMBLY (L)
424	7390551	PLATE
425	6879051	HOLDER
426	4500401	HOLDER LINK ASSEMBLY
427	6679151	DOOR ARM
428	6301022	SPRING
501	5459283	UPPER CYLINDER
502	5459291	LOWER CYLINDER
503	5792131	BRUSH
504	5391211	STATOR
505	5773401	ROTER
506	5792811	WIRE HOLDER
507	5391203	CYL,FG PC BOARD
901	8699406	SCREW (3X6)

SYMBOL-NO	P-NO	DESCRIPTION
		FOR FINAL ASSEMBLY
902	8699414	BT BIND HEAD SCREW-3MMDX14MM
903	8699412	BIND TAPPING SCREW-3MMDX12MM(BLACK)
904	8691410	BT BIND SCREW-3MMDX10MM
905	8671406	DT SCREW-3MMDX6MM
906	8699408	BT BIND HEAD SCREW-3MMDX8MM (BLACK)
907	8699410	BT BIND HEAD SCREW-3MMDX10MM (BLACK)
909	8691105	SCREW
911	8741403	SCREW (B3X6)
912	8671406	DT SCREW-3MMDX6MM
914	8741406	SCREW (B3X6)
915	8691608	SCREW 4X8BT
916	8811106	LOCK WASHER
917	8671406	DT SCREW-3MMDX6MM
950	7541395	SPECIAL SCREW
951	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
952	8741408	SCREW (B3X8)
954	7781133	BT SCREW-3MMD
955	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
956	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
960	8691406	BIND TAPPING SCREW-3MMDX8MM (BLACK)
959	7773063	SCREW
960	8741408	SCREW (B3X8)
962	8650412	SCREW 3X12 WITH SPRING WASHER
963	8812114	WASHER - 3MMD SMALL
963	8821114	3D NUT
964	8741103	SCREW(2X3B)
965	7781872	SCREW-3MMDX8MM
966	7773086	SCREW
967	8741414	BINDING SCREW - 3MMD X 14MM
968	8821114	3D NUT
969	8741408	SCREW (B3X8)
970	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
971	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
972	8691312	BT BIND SCREW-2.6MMDX12MM
975	7781131	B TIGHTING SCREW-3MMDX12MM
976	7782761	SCREW 3X8BT
977	8691408	BIND TAPPING SCREW-3MMDX8MM (BLACK)
978	8741408	SCREW (B3X8)
979	8650408	SCREW
983	8741403	BIND SCREW-3MMDX3MM
984	8671406	DT SCREW-3MMDX6MM
985	8671406	DT SCREW-3MMDX6MM
986	8678405	DT SCREW-3MMDX5MM (BLACK)
988	8691410	BT BIND SCREW-3MMDX10MM
989	8711103	PAN HEAD SCREW-2MMDX3MM
990	8741406	BIND SCREW - 3MMD X 6MM

SYMBOL-NO	P-NO	DESCRIPTION
		FOR ACCESSARIES
	5638261	WIRELESS REMOTE CONTROL BOX
	5687572	MATCHING BOX
	5687871	MACHING CONNECTOR
	5893172	FEEDER CABLE
	5896764	CABLE

HITACHI SALES CORPORATION OF AMERICA
Eastern Regional Office
1290 Wall Street West, Lyndhurst, New Jersey 07071, U.S.A.
Tel. 201-935-8980

Mid-Western Regional Office
1400 Morse Ave., Elk Grove Village, Ill. 60007, U.S.A.
Tel. 312-593-1550

Southern Regional Office
510 Plaza Drive, College Park, Georgia 30349, U.S.A.
Tel. 404-763-0360

Western Regional Office
401 West Artesia Boulevard, Compton, California 90220 U.S.A.
Tel. 213-537-8383

HITACHI SALES CORPORATION OF HAWAII. INC.
3219 Koapaka Street. Honolulu, Hawaii 96819, U.S.A.
Tel. 808-836-3621

HITACHI (HSC) CANADA INC.
3300 Trans-Canada Highway, Pointe Claire, Quebec,
H9R 1B1, Canada
Tel. 514-697-9150

Hitachi Sales Centroamericana, S.A.
San Rafael de Escazu, (Apartado 10272), San Jose,
Costa Rica
Tel. 28-2011, 28-0037

Hitachi Sales Corporation de Panama, S.A.
Nuevo Reparto el Carmen , Calle Ramon Arias y Calle B
Edificio Brasil 100, (Apartado 7657) Panama 5
Panama City, Rep. of Panama
Tel. 61-3100, 61-4305

Hitachi Sales de Chile Cia., Ltda.
Av. Mexico, 0183, Casilla 9793, Correo Central
Santiago, Chile
Tel. 774165

HITACHI Ltd. TOKYO JAPAN
Head Office: THE HITACHI ATAGO BLDG.
No. 15-12, 2-Chome Nishi-Shinbashi
Minato-Ku, Tokyo 105, Japan
Tel. Tokyo (03) 502-2111

VT-64A **TK** **No. 2266E** **TOKAI**

Printed in Japan FF—HRR(H.E.C)